INVENTOR SEARCH

```
=> d his l120

     (FILE 'HCAPLUS' ENTERED AT 15:01:40 ON 03 JUL 2007)
L120         26 S L119 OR L18 OR L21

=> d que l120
L3          123 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("NATIONAL FOOD
                RESEARCH INSTITUTE JAPAN"/PA OR "YUSHIN GIKEN CO
                LTD"/PA)
L13             QUE  ABB=ON  PLU=ON  ISSHIKI K?/AU
L14             QUE  ABB=ON  PLU=ON  OGAWA J?/AU
L17             QUE  ABB=ON  PLU=ON  YUSHIN GIKEN?/PA,CS,SO,CO
L18           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 AND L14
L19         887 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L13 OR L14)
L20          76 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND (FOOD? OR
                FEED OR DRINK?)
L21           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND (L3 OR L17)
L22       24850 SEA FILE=HCAPLUS ABB=ON  PLU=ON  INDICATORS+PFT,OLD,NT/
                CT
L24       47461 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "FOOD ANALYSIS"+PFT,OL
                D,NT/CT
L29             QUE  ABB=ON  PLU=ON  AEROGEN?
L117         53 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND (BEV? OR
                FRUIT? OR VEG?)
L118        113 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L117 OR L20
L119         26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L118 AND (L29 OR L24
                OR L22 OR INDICAT? OR PH)
L120         26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L119 OR L18 OR L21


=> d his l139

     (FILE 'AGRICOLA, FROSTI, FSTA' ENTERED AT 15:38:30 ON 03 JUL 2007)
L139          7 S L138 AND L103

=> d que l139
L3          123 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("NATIONAL FOOD
                RESEARCH INSTITUTE JAPAN"/PA OR "YUSHIN GIKEN CO
                LTD"/PA)
L13             QUE  ABB=ON  PLU=ON  ISSHIKI K?/AU
L14             QUE  ABB=ON  PLU=ON  OGAWA J?/AU
L16             QUE  ABB=ON  PLU=ON  (L13 OR L14)
L17             QUE  ABB=ON  PLU=ON  YUSHIN GIKEN?/PA,CS,SO,CO
L29             QUE  ABB=ON  PLU=ON  AEROGEN?
L38             QUE  ABB=ON  PLU=ON  MICROORG?
L42             QUE  ABB=ON  PLU=ON  ?BACTER?
L49             QUE  ABB=ON  PLU=ON  YEAST? OR MOLD? OR BACTER?
L103            QUE  ABB=ON  PLU=ON  PY<2003 OR PRY<2003 OR AY<2003 OR
                MY<2003 OR REVIEW/DT
L125      21919 SEA FOOD(3N) ANAL?
L129          4 SEA L16 AND L125
L130        358 SEA L16
L131          2 SEA L130 AND (L3 OR L17)
L132          6 SEA L129 OR L131
L133        255 SEA L130 AND (FOOD OR BEV? OR FRUIT? OR VEG? OR
                INDICAT? OR PH OR L29 OR L38 OR L42 OR L49 OR BUBBL?)
L134          4 SEA L133 AND L125
L137          5 SEA L133 AND INDICATOR?
L138          9 SEA L129 OR L131 OR L132 OR L134 OR L137
L139          7 SEA L138 AND L103


=> dup rem l120 l139
FILE 'HCAPLUS' ENTERED AT 16:08:54 ON 03 JUL 2007
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L HENDERSON

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FILE 'AGRICOLA' ENTERED AT 16:08:54 ON 03 JUL 2007

FILE 'FROSTI' ENTERED AT 16:08:54 ON 03 JUL 2007

FILE 'FSTA' ENTERED AT 16:08:54 ON 03 JUL 2007

PROCESSING COMPLETED FOR L120
PROCESSING COMPLETED FOR L139
L153 31 DUP REM L120 L139 (2 DUPLICATES REMOVED)
ANSWERS '1-26' FROM FILE HCAPLUS
ANSWER '27' FROM FILE AGRICOLA
ANSWERS '28-30' FROM FILE FROSTI
ANSWER '31' FROM FILE FSTA

INVENTOR SEARCH RESULTS

=> d l153 1-31 ibib ed ab

L153 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2003:624697 HCAPLUS Full-text
TITLE: Method of evaluating qualities of **food** or **drink** and **indicator** therefor
INVENTOR(S): **Isshiki, Kenji; Ogawa, Junzo**
PATENT ASSIGNEE(S): **National Food Research Institute, Japan; Yushin Giken Co., Ltd.**
SOURCE: PCT Int. Appl.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003067254	A1	20030814	WO 2003-JP1222	2003 0206
W: JP, KR, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
EP 1482308	A1	20041201	EP 2003-737501	2003 0206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, CY, TR, BG, CZ, EE, HU, SK				
US 2005003051	A1	20050106	US 2004-500870	2004 0721

PRIORITY APPLN. INFO.:

JP 2002-29270	A	2002 0206
JP 2002-168049	A	2002 0610
WO 2003-JP1222	W	2003 0206

ED Entered STN: 14 Aug 2003
AB It is intended to provide a method of evaluating the qualities of a **food**, a **drink** or the like whereby the deterioration in the qualities (in particular, the freshness) of the **food**, **drink** or the like, i.e., the amount of microorganisms growing therein depending on temperature or with the passage of time can be conveniently and accurately detected to thereby evaluate the qualities thereof, and an **indicator** therefor. Namely, a **food**, a **drink** or the like is enclosed together with a fermentation base containing a gas-generating microorganism selected from among yeasts, fungi and bacteria in a sealed container made of a synthetic resin or a flexible film bag. Then the qualities of the **food**, etc. are evaluated depending on the amount of the gas generated accompanying the formation of an acid in the container (bag), and an **indicator** for the evaluation.
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:612484 HCAPLUS Full-text
DOCUMENT NUMBER: 143:132273
TITLE: Development of multiplex PCR genotyping method for identifying microbial **food** contamination
INVENTOR(S): Horikoshi, Naoko; Kawasaki, Susumu; Okada, Yukio; Takeshita, Kazuko; Sameshima, Takashi; Kawamoto, Shinichi; **Isshiki, Kenji**
PATENT ASSIGNEE(S): Prima Meat Packers, Ltd., Japan; National Food Research Institute
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005064016	A1	20050714	WO 2004-JP19340	2004 1224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1707638	A1	20061004	EP 2004-807697	2004 1224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				

PRIORITY APPLN. INFO.:

JP 2003-435943	A	2003 1226
WO 2004-JP19340	W	2004 1224

ED Entered STN: 15 Jul 2005

AB The claimed multiplex PCR genotyping method provides the method of the detection of contaminating pathogenic microorganisms (Escherichia coli O157, Listeria monocytogenes and salmonellas) in **foods** (especially meats and processed meat products). The method includes procedures for the DNA extraction from cultured bacteria cells by treating a lytic enzyme such as achromopeptidase or lysozyme and/or a bacteriocin having a bacteriolysis activity such as enterolysin with a detergent (condensed ethylene oxide derivs. such as sorbitan monolaurate) and a protein-denaturing agent such as guanidine isothiocyanate. The primers specific for the genomic DNAs of the potential target microorganisms have been designed. The mixture of these primers (total primer concentration to be ≤ 750 nM) is used in the amplification by the multiplex PCR in a single test tube. The method also includes the bacterial culture method to achieve optimum growth of the target bacteria (especially Listeria) to obtain sufficient DNA sample for multiplex PCR. The culture conditions for achieving proliferation of 1 CFU/100 g of the microorganisms to the level of 103 CFU/mL or more for 18 to 48 h (typically using the culture condition of **pH** ≥ 5.1, [glucose] ≤ 0.15 % and [phosphate buffer] ≤ 50 mM) are claimed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:301915 HCAPLUS Full-text
DOCUMENT NUMBER: 142:335321
TITLE: Method for visible determination of **food** freshness and quality
INVENTOR(S): **Isshiki, Kenji**; Kawamoto, Shinichi; **Ogawa, Junzo**
PATENT ASSIGNEE(S): **National Food Research Institute, Japan**; **Yushin Giken K. K.**
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005087044	A	20050407	JP 2003-322588	20030916
PRIORITY APPLN. INFO.:			JP 2003-322588	20030916

ED Entered STN: 08 Apr 2005
AB The **food** samples and reaction solns. are stored sep. in transparent soft film bags with partition sealing. The partition sealing are removed or peeled to mix the **food** samples and reaction solns. prior to determine the freshness and quality of the preserved **foods**. Generation of gas such as CO2, change of color of reaction solns. such as anthocyanin solution, etc., are visible signs of the presence of microorganisms and degradation of quality of **foods**.

L153 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:206194 HCAPLUS Full-text
DOCUMENT NUMBER: 143:284996
TITLE: Efficacy of acidified sodium chlorite treatments in reducing Escherichia coli O157:H7 on Chinese cabbage
AUTHOR(S): Inatsu, Yasuhiro; Bari, Md. Latiful; Kawasaki, Susumu; **Isshiki, Kenji**; Kawamoto, Shinichi
CORPORATE SOURCE: Food Hygiene Team, National Food Research Institute, Tsukuba, 305-8642, Japan
SOURCE: Journal of Food Protection (2005), 68(2), 251-255
CODEN: JFPRDR; ISSN: 0362-028X
PUBLISHER: International Association for Food Protection
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 09 Mar 2005
AB Efficacy of acidified NaClO2 for reducing the population of Escherichia coli O157:H7 pathogens on Chinese cabbage leaves was evaluated. Washing leaves with distilled water could reduce the population of E. coli O157:H7 by approx. 1.0 log CFU/g, whereas treating with acidified chlorite solution could reduce the population by 3.0 log CFU/g without changing the leaf color. A similar level of reduction was achieved by washing with NaClO2 solution containing various organic acids. However, acidified NaClO2 in combination with a mild heat treatment reduced the population by approx. 4.0 log CFU/g without affecting the color, but it softened the leaves. Moreover, the efficacy of the washing treatment was similar at low (4°C) and room (25°C) temps., **indicating** that

acidified sodium chloride solution could be useful as a sanitizer for surface washing of fresh produce.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:623892 HCAPLUS Full-text
DOCUMENT NUMBER: 144:187350
TITLE: A rapid and simple determination of **food**-borne Salmonella strains by using multi-channel oxygen electrodes
AUTHOR(S): Nambo, Yukio; Suye, Shin-Ichiro; Matsuura, Takanori; Murakami, Ayumi; Hori, Teruo; **Isshiki, Kenji**
CORPORATE SOURCE: Fiber Amenity Engineering Course, Graduate School of Engineering, University of Fukui, Fukui, 910-8507, Japan
SOURCE: Biocontrol Science (2005), 10(1&2), 73-77
CODEN: BISCFY; ISSN: 1342-4815
PUBLISHER: Society for Antibacterial and Antifungal Agents, Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 19 Jul 2005
AB A rapid and simple procedure for the specific detection of Salmonella was developed by using a dissolved oxygen measurement device (DOX-96) with anti-Salmonella antibodies. In the DOX-96 system, a gold electrode is located at the bottom of each well, in a 96-hole plate. The gold electrode acts as the working electrode. The anti-Salmonella antibodies are then introduced into the system and immobilized on each well of the plate. Wells contained bound Salmonella Typhimurium cells which were incubated at 37°, and the oxygen consumption in each well was monitored. It appeared that the oxygen consumption curve was inversely proportional to the growth of S. Typhimurium. In the present method, S. Typhimurium cells with an initial concentration of 2.5+100-2.5+108 CFU/mL in the sample showed an oxygen consumption curve within 13 h of incubation. Other microorganisms, such as Escherichia coli, Pseudomonas aeruginosa, Corynebacterium aquaticum and Bacillus subtilis did not interfere with the assay system. Thus the present method would be applicable toward a rapid and simple detection of Salmonella in **food**.
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:894078 HCAPLUS Full-text
DOCUMENT NUMBER: 140:90574
TITLE: Inactivation of Norwalk-like viruses (NLV) by electrolyzed acid water
AUTHOR(S): Kawasaki, Susumu; Kawasaki, Tomomi; Hayashi, Yukinao; Yoshida, Kyouichiro; Isobe, Seiichiro; **Isshiki, Kenji**
CORPORATE SOURCE: National Food Research Institute, Tsukuba, 305-8642, Japan
SOURCE: Bokin Bobai (2003), 31(10), 529-535
CODEN: BOBODP; ISSN: 0385-5201
PUBLISHER: Nippon Bokin Bobai Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 17 Nov 2003
AB We investigated the inactivation rate of Norwalk-like viruses (NLV) by electrolyzed acid water (EAW). RT-PCR and Nested-PCR methods were used for NLV detection. Treatment with a low- **pH** (pH2.6) solution, EAW or sodium hypochlorite (NaClO) solution (200 ppm) for 5 min was performed; EAW and 200 ppm of NaClO solution could reduce NLV in the order of 3 logs. The inactivation rate using EAW was greater than that using NaClO when EAW and NaClO were adjusted to the same available chlorine concentration Moreover, from these treatment samples the PCR amplicon of NLV could not be identified

by the RT-PCR method. Therefore, these results showed that the outer structure or RNA of NLV was destroyed by EAW treatment.

L153 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:439077 HCAPLUS Full-text
DOCUMENT NUMBER: 137:6089
TITLE: Preparation indoles and their use for prophylactic and/or therapeutic treatment of angiogenesis-related diseases
INVENTOR(S): Nagai, Hazuki; Tsuchiya, Ayako; Onuki, Kaname; Agata, Naoki; Tsuchida, Toshio; **Isshiki, Kunio**
PATENT ASSIGNEE(S): Mercian Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002167376	A	20020611	JP 2000-365310	2000 1130
PRIORITY APPLN. INFO.:			JP 2000-365310	2000 1130

OTHER SOURCE(S): MARPAT 137:6089
ED Entered STN: 11 Jun 2002
AB Indoles I [R1, R2 = H, C1-6 linear or branched (halo)alkyl; R3 = C1-16 linear or branched (halo)alkyl, C1-4 alkenyl, 1-(5-alkylaminonaphthyl), 2-furanyl, 2-thienyl, (un)substituted **Ph**, etc.] or their salts, useful for treatment of tumor, arthritis, diabetic retinopathy, etc., are prepared Thus, 380 mg 2,3-dimethyl-7-nitroindole was hydrogenated over Pd/C and amidated with 4-methoxy-2-nitrobenzenesulfonyl chloride to give 286 mg N-(2,3-dimethyl-1H-indol-7-yl)-2-nitro-4- methoxybenzenesulfonamide, which at 10 μM inhibited 59.9% **VEGF** formation by human fibroblast cell.

L153 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:213273 HCAPLUS Full-text
DOCUMENT NUMBER: 137:124363
TITLE: Effects of **food** ingredients on inactivation of Escherichia coli by hydrostatic pressure treatment with the addition of allyl isothiocyanate
AUTHOR(S): Ogawa, Tetsuro; Nakatani, Atsushi; Matsuzaki, Hajime; Isobe, Seiichiro; **Isshiki, Kenji**
CORPORATE SOURCE: Food Processing Research Institute of Shimane Prefecture, Shimane, 697-0006, Japan
SOURCE: Food Science and Technology Research (2001), 7(4), 315-318
CODEN: FSTRFS; ISSN: 1344-6606
PUBLISHER: Japanese Society for Food Science and Technology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Mar 2002
AB The effects of **pH**, the major **food** ingredients sodium chloride, sucrose, protein and organic acids on Escherichia coli inactivation by hydrostatic pressure treatment with the addition of allyl isothiocyanate (AIT) were investigated. E. coli JCM 1649 and CR-3, the latter of which was O157:H7, were increasingly inactivated by pressurization at

pHs lower or higher than neutral. That is, both strains were completely inactivated by pressure treatment: JCM 1649 at 200 MPa and CR-3 at 300 MPa, at **pH** 4.5 or 8 when 80 μg/mL of AIT was added, although at other **pHs** they survived under the same pressure and AIT condition. Sucrose or protein decreased inactivation of E. coli JCM 1649 in pressure treatment combined with AIT, and the presence of 1% or more did not change the number of bacterial cells inactivated, regardless of the AIT concentration The presence of 3% or more of sodium chloride also decreased inactivation but a lower concentration, i.e., 1% or so, enhanced the inactivation of the bacterium. Lowering **pH** by adding 0.01% of the organic acids succinic or malic acid was effective in combined treatment-induced inactivation. These findings suggested that some **food** ingredients, for example, a small amount of sodium chloride and organic acids, might enhance inactivation in pressure treatment combined with AIT, and that this combination was effective in practical application.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:540645 HCAPLUS Full-text
DOCUMENT NUMBER: 136:4827
TITLE: A detection method for recombinant DNA from genetically modified maize CBH351
AUTHOR(S): Matsuoka, Takeshi; Kuribara, Hideo; Suefuji, Seiko; Miura, Hirohito; Kusakabe, Yuko; Akiyama, Hiroshi; Goda, Yukihiro; **Isshiki, Kenji**; Toyoda, Masatake; Hino, Akihiro
CORPORATE SOURCE: Natl. Food Res. Inst., MAFF, 2-1-2 Kannondai, Tsukuba, Ibaraki, 305-8642, Japan
SOURCE: Shokuhin Eiseigaku Zasshi (2001), 42(3), 197-201
CODEN: SKEZAP; ISSN: 0015-6426
PUBLISHER: Nippon Shokuhin Eisei Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 27 Jul 2001
AB A method using polymerase chain reaction (PCR) was designed for the detection of genetically modified maize CBH351, which has not authorized as safe for use in **foods** and **feeds** in Japan yet. We analyzed a recombinant DNA (r-DNA) sequence introduced into CBH351 maize and designed specific primer pairs to amplify a segment including part of the r-DNA. The PCR products obtained by using the designed primer pairs are specific for CBH351 and should prevent false pos. results caused by other maizes and other main cereal crops. The r-DNA introduced into CBH351 could be detected from maize samples containing 0.05-0.1% CBH351 maize. This sensitivity is theor. equivalent to a level of several genome copies and so this technique is a very efficient means to detect CBH351 maize.

L153 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:161924 HCAPLUS Full-text
DOCUMENT NUMBER: 134:221631
TITLE: Rapid and convenient estimation of bacterial cell count in **food** using oxygen electrode sensor
AUTHOR(S): Amano, Yoshihisa; Arai, Junichiro; Yamanaka, Shunsuke; **Isshiki, Kenji**
CORPORATE SOURCE: Daikin Environ. Lab., Ltd., 3 Miyukigaoka Tsukuba-shi, Ibaraki, 305-0841, Japan
SOURCE: Nippon Shokuhin Kagaku Kogaku Kaishi (2001), 48(2), 94-98
CODEN: NSKKEF; ISSN: 1341-027X
PUBLISHER: Nippon Shokuhin Kagaku Kogakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 07 Mar 2001

AB Bacterial respiration measurement method with oxygen electrode sensor has been applied to estimate the bacterial cell count in **foods**. The relationship between respiration of bacteria and its bacterial cell count was examined with the newly developed O2 uptake detector an the conventional agar-plate. Using 168 **food** samples, the new method was evaluated. Samples were processed with a stomacher for one minute in saline, and injected into the ninety-six well sensor plate with oxygen electrodes embedded. After nutrient broth was added to each well, dissolved oxygen concentration of each sample was monitored continuously for 24 h at a temperature of 35°. Detection time for oxygen electrode method was defined as the elapsed time when the dissolved oxygen is consumed by bacterial respiration to 60% of neg. control oxygen concentration It depended on the number of conventional plate count. As for samples contg 105 [cfu/g] bacteria, detection time was approx. 6 h, and it decreased linearly with the log number of standard plate count, with a slope of -2.6 [hour/cfu/g]. Correlation coefficient for the estimated cell count with reference curve and conventional plate count was 0.83. This new method detected bacteria more rapidly, in proportion to bacterial concentration in **foods**.

L153 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:255990 HCAPLUS Full-text
DOCUMENT NUMBER: 134:279766
TITLE: A multiplex PCR method of detecting recombinant DNAs from five lines of genetically modified maize
AUTHOR(S): Matsuoka, Takeshi; Kuribara, Hideo; Akiyama, Hiroshi; Miura, Hirohito; Goda, Yukihiro; Kusakabe, Yuko; **Isshiki, Kenji**; Toyoda, Masatake; Hino, Akihiro
CORPORATE SOURCE: Natl. Food Res. Inst., Ministry of Agric., For. Fish., 2-1-2, Kannondai, Tsukuba, Ibaraki, 305-8642, Japan
SOURCE: Shokuhin Eiseigaku Zasshi (2001), 42(1), 24-32
CODEN: SKEZAP; ISSN: 0015-6426
PUBLISHER: Nippon Shokuhin Eisei Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 11 Apr 2001
AB Seven lines of genetically modified (GM) maize have been authorized in Japan as **foods** and **feeds** imported from the USA. We improved a multiplex PCR method described in the previous report in order to distinguish the five lines of GM maize. Genomic DNA was extracted from GM maize with a silica spin column kit, which could reduce exptl. time and improve safety in the laboratory and potentially in the environment. We sequenced recombinant DNA (r-DNA) introduced into GM maize, and re-designed new primer pairs to increase the specificity of PCR to distinguish five lines of GM maize by multiplex PCR. A primer pair for the maize intrinsic zein gene (Zel) was also designed to confirm the presence of amplifiable maize DNA. The lengths of PCR products using these six primer pairs were different. The Zel and the r-DNAs from the five lines of GM maize were qual. detected in one tube. The specific PCR bands were distinguishable from each other on the basis of the expected length. The r-DNA could be detected from maize samples containing 0.5% of each of the five lines of GM maize. The sensitivity would be acceptable to secure the verification of non-GMO materials and to monitor the reliability of the labeling system.

L153 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:398924 HCAPLUS Full-text
DOCUMENT NUMBER: 133:22082
TITLE: Method and apparatus for automatic measurement of liquid concentrations
INVENTOR(S): Tateno, Kazuhiro; Tsubota, Yoshitami; Takechi, Sadatoshi; **Isshiki, Katsufumi**; Wakasa, Akira; Ukiana, Yuji
PATENT ASSIGNEE(S): Miura Kogyo K. K., Japan; Miura Kenkyusho K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000162132	A	20000616	JP 1998-356917	19981130
PRIORITY APPLN. INFO.:			JP 1998-356917	19981130

ED Entered STN: 16 Jun 2000
AB Concentration of a sample solution is determined by its reaction with a reagent followed by colorimetric anal. In the above process, the sample container is washed before feeding the sample solution Apparatus for the above process is also claimed. The container may also be post-washed. The process is for determination of dissolved O, hardness, **pH**, etc. of industrial and tap water.

L153 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:156294 HCAPLUS Full-text
DOCUMENT NUMBER: 130:191159
TITLE: Water hardness **indicator** reagent
INVENTOR(S): Tateno, Kazuhiro; Tsubota, Yoshitami; Takechi, Sadatoshi; Nakajima, Junichi; Yamashita, Masasumi; **Isshiki, Katsufumi**; Fukumura, Takeshi; Ukiana, Yuji
PATENT ASSIGNEE(S): Miura Kogyo K. K., Japan; Miura Kenkyusho K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11064323	A	19990305	JP 1997-247829	19970827
JP 3301358	B2	20020715		
JP 2002181802	A	20020626	JP 2001-327059	19970827
JP 3512028	B2	20040329		
JP 2002181803	A	20020626	JP 2001-327060	19970827
JP 3475951	B2	20031210		
CA 2245745	A1	19990227	CA 1998-2245745	19980826
CA 2245745	C	20060221		
US 6190611	B1	20010220	US 1998-141370	19980827
PRIORITY APPLN. INFO.:			JP 1997-247829 A3	19970827

ED Entered STN: 10 Mar 1999

AB The water hardness **indicator** reagent comprises a EBT, a **pH** buffer, and a masking agent as essential components, and contains Mg-EDTA. This reagent is used to determine water hardness in tap water, boiler water, and industrial water.

L153 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:139466 HCAPLUS Full-text
DOCUMENT NUMBER: 130:217268
TITLE: Method for measuring liquid concentration
INVENTOR(S): Tateno, Kazuhiro; Tsubota, Yoshitami; Takechi, Sadatoshi; **Isshiki, Katsufumi**; Fukumura, Takeshi
PATENT ASSIGNEE(S): Miura Kogyo K. K., Japan; Miura Kenkyusho K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11051871	A	19990226	JP 1997-220833	1997 0731
JP 3899605	B2	20070328		
PRIORITY APPLN. INFO.:			JP 1997-220833	1997 0731

ED Entered STN: 04 Mar 1999
AB The title method is used to measuring dissolved O concentration, hardness, and **pH** of industrial and **drinking** water. The method comprises the steps of: adding a reagent solution into the sample, measuring the color change of the solution, and determining the liquid sample concentration using a calibration table based on the measured alkali concentration

L153 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:292683 HCAPLUS Full-text
DOCUMENT NUMBER: 133:119120
TITLE: Cytotoxicity testing for evaluating **food** safety
AUTHOR(S): Yamashoji, Shiro; **Isshiki, Kenji**
CORPORATE SOURCE: Kobe Gakuin Women's College, Kobe, 653-0861, Japan
SOURCE: Animal Cell Technology: Challenges for the 21st Century, Proceedings of the Joint International Meeting of the Japanese Association for Animal Cell Technology (JAACT) and the European Society for Animal Cell Technology (ESACT), 2nd, Kyoto, July 26-30, 1998 (1999), Meeting Date 1998, 227-229. Editor(s): Ikura, Kouji. Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 68WIAS
DOCUMENT TYPE: Conference
LANGUAGE: English
ED Entered STN: 05 May 2000
AB Different cytotoxicity tests are used to determine **food** safety. The authors propose rapid cytotoxicity testing based on menadione-catalyzed H2O2 production by viable cells, which depends on both intracellular NAD(P)H concentration and plasma membrane-bound quinone oxidoreductase (EC 1.6.99.2). Damage to either the cytosolic NAD(P)H production system or plasma membrane causes a loss of menadione-catalyzed H2O2 production resulting from cytotoxic events and is rapidly determined by colorimetric

assay of H2O2. This assay requires 10 min, and is much faster than MTT reduction or neutral red inclusion assays requiring 4 h. In cytotoxicity testing of **food** additives such as antioxidant BHA and BHT or phydroxybenzoate derivative preservatives, cytotoxic events were observed 4 h after mixing these **food** additives with animal cells. Natural toxins such as tomatine, solanine, and chaconine contained in tomatoes and potatoes were also detected 4 h after incubation with animal cells. The authors are now using this technique to test different **foods**, including whole **foods**.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L153 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:307625 HCAPLUS Full-text
DOCUMENT NUMBER: 130:324445
TITLE: A detection method for recombinant DNA from genetically modified soybeans and processed **foods** containing them. I
AUTHOR(S): Matsuoka, Takeshi; Kawashima, Yoshimi; Akiyama, Hiroshi; Miura, Hirohito; Goda, Yukihiro; Sebata, Tamaki; **Isshiki, Kenji**; Toyoda, Masatake; Hino, Akihiro
CORPORATE SOURCE: Natl. Food Res. Inst., Tsukuba, 305-8642, Japan
SOURCE: Shokuhin Eiseigaku Zasshi (1999), 40(2), 149-157
CODEN: SKEZAP; ISSN: 0015-6426
PUBLISHER: Nippon Shokuhin Eisei Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 19 May 1999
AB A method using polymerase chain reaction (PCR) was designed for the detection of **food** or **food** ingredients derived from genetically modified soybeans (GMS), imported from the United States, in a mixture with conventional non-genetically modified soybeans (non-GMS). The presence of recombinant DNA (DNA) in the soybeans could be detected with three different pairs of specific oligonucleotide primers designed from the sequences of the introduced genes. The soybean intrinsic lectin Le1 gene was used as an internal control. The results of the PCR amplification **indicated** that a method using cetyltrimethylammonium bromide (CTAB) was most suitable for DNA extraction from soybeans and the processed **foods**. The recombinant DNA could be detected in dry soybeans containing 0.05% GMS and tofu made from soybeans containing 0.5% GMS. Of 41 com. tofu samples, recombinant DNA was detected from 27 tofu samples. It is, however, difficult to carry out PCR on DNA extracted from soybeans steamed at 131°C or on fermented natto, although the Le1 gene was detected from soybeans steamed at 115°C and in the fermented natto when a nested PCR technique was employed.

L153 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:389443 HCAPLUS Full-text
DOCUMENT NUMBER: 129:40291
TITLE: Bacterial control by hydrostatic pressure treatment with addition of allyl isothiocyanate
AUTHOR(S): Ogawa, Tetsuro; Matsuzaki, Hajime; **Isshiki, Kenji**
CORPORATE SOURCE: Food Process. Res. Inst. Shimane Prefect., Hamada, 697-0006, Japan
SOURCE: Nippon Shokuhin Kagaku Kogaku Kaishi (1998), 45(6), 349-356
CODEN: NSKKEF; ISSN: 1341-027X
PUBLISHER: Nippon Shokuhin Kagaku Kogakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 25 Jun 1998
AB For the purpose of preventing **food** spoilage, bactericidal and bacteriostatic effects by hydrostatic pressure treatment with addition of allyl isothiocyanate (AIT) were examined When the **vegetative** cells of bacteria suspended in a phosphate-buffered saline (**pH** 7.2) without AIT were treated under hydrostatic pressure at room temperature for 10

min, the sterilization required 300-500 MPa condition. In the case of spores of Bacillus subtilis, it was not found any effects on the sterilization until 600 MPa condition. In comparison of 2 strains of Escherichia coli, type CR-3 was more resistant against hydrostatic pressure than another one. Most microorganisms including E. coli CR-3 were sterilized at 200 or 300 MPa with addition of small amount of AIT, however, Staphylococcus aureus spores of B. subtilis were not killed in these conditions. In the examination of the growth curve of each strain the lag phase of the strains treated under 200 MPa with addition of AIT was prolonged more than that of non-treated ones. Application of hydrostatic pressure treatment with AIT for preservation of "Asazuke" (low salted **vegetables**) was effective for extending the shelf life of the product.

L153 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:308014 HCAPLUS Full-text
DOCUMENT NUMBER: 125:56475
TITLE: Bioassay method for glycoalkaloids in **food** with animal cell cultures
AUTHOR(S): Asano, Masahiro; Yamashoji, Shiro; **Isshiki, Kenji**
CORPORATE SOURCE: National Food Research Institute, Ministry Agriculture, Forestry and Fisheries, Tsukuba, 305, Japan
SOURCE: Animal Cell Technology: Developments towards the 21st Century, [Proceedings of the Meeting], Veldhoven, Neth., Sept. 12-16, 1994 (1995), Meeting Date 1994, 933-937. Editor(s): Beuvery, E. Coen; Griffiths, J. Brian; Zeijlemaker, Wim P. Kluwer: Dordrecht, Neth.
CODEN: 62VAAP
DOCUMENT TYPE: Conference
LANGUAGE: English
ED Entered STN: 25 May 1996
AB Glycoalkaloids, e.g. solanine and tomatine are found in potato, tomato or other plants. They are toxic to animals. It is difficult to analyze for them in **food**. Cell lines of NIH3T3, HepG2, HuH-6KK and U937 were tested for detecting cytotoxicity of tomatine in tomatoes. The following detection methods were compered; Alamar Blue, MTT, WST-1 and chemiluminescence. These methods were useful for detection of cytotoxicity of tomatine. Particularly, a combination of HepG2 cells with the chemiluminescent method was easier to operate and more rapid than others.

L153 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:610204 HCAPLUS Full-text
DOCUMENT NUMBER: 113:210204
TITLE: Gas chromatographic determination of saccharin in **foods** by using trimethylsilyldiazomethane
AUTHOR(S): Momozono, Yuko; Eto, Shuichi; **Isshiki, Kenji**
CORPORATE SOURCE: Kitakyushu Munic. Inst. Environ. Health Sci., Kitakyushu, 804, Japan
SOURCE: Eisei Kagaku (1990), 36(1), 56-61
CODEN: ESKGA2; ISSN: 0013-273X
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 08 Dec 1990
AB A rapid and convenient methylation of saccharin was developed for determination of its content in **foods** by gas chromatog. Saccharin was methylated with trimethylsilyldiazomethane (TMSD). The typical reaction conditions were as follows; 200 μg saccharin in 0.4 mL EtOAc was mixed with 50 μL MeOH and 10 μL of 10% TMSD in hexane and held at room temperature for 10 min. The N-methylsaccharin formation from saccharin with TMSD was about 84%, comparable to that with diazomethane. N-Methylsaccharin was determined by FID-gas chromatog. with a column of 3% SE-30 on Uniport B or 10% OV-351 on Uniport HPS. Anthracene was used as an internal standard Preservatives (sorbic

acid, dehydroacetic acid, benzoic acid, p-hydroxybenzoic acid and propionic acid), antioxidants (BHA and BHT), and organic acids (tartaric, oxalic, and citric) did not affect the methylation, whereas fatty acids (lauric acid, oleic acid, linoleic acid, and palmitic acid) increased the formation of methylsaccharin slightly. The recoveries of Na saccharin from soy sauce spiked at 250 μg/g were 93.7% and those from pickled scallions spiked at 500 μg/g were 96.9%. The detection limit of saccharin in **foods** was about 20 μg/g as Na saccharin.

L153 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:452785 HCAPLUS Full-text
DOCUMENT NUMBER: 103:52785
TITLE: Rapid separative determination of ortho- and polyphosphates in **foods**
AUTHOR(S): **Isshiki, Kenji**; Toyoda, Masatake; Harada, Motoo
CORPORATE SOURCE: Kitakyushu Munic. Inst. Environ. Sci., Kitakyushu, 804, Japan
SOURCE: Nippon Shokuhin Kogyo Gakkaishi (1985), 32(3), 216-18
CODEN: NSKGAX; ISSN: 0369-5727
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 24 Aug 1985
AB A **food** sample was homogenized, defatted with Et2O, and extracted with 20% CCl3CO2H solution twice. The exts. were combined, neutralized with NaOH, diluted with 5 mM EDTA solution (**pH** 5.0), and passed through a Dowex 1 (Cl-) column. After washing with 5 mM EDTA solution, ortho- pyro-, tri-, and polyphosphates were eluted with 0.09, 0.19, and 0.30 M KCl in 5 mM EDTA solution, and 2N HCl, resp. The eluates were heated with addition of ammonium molybdate and again heated with addition of hydrazine-HCl. Absorbances of the reaction mixts. were measured at 830 nm. Recoveries of phosphates (0.02-2% as P2O5) from **foods** were 80.2-104% for ortho- and pyrophosphates, 78.7-99.3% for tripolyphosphate, and 69.3-93.6% for hexametaphosphate. Cola **drinks**, Chinese noodle, and miso contained only orthophosphate (0.10-0.25% as P2O5), but pyro-, tripoly-, and polyphosphates in addition to orthophosphate were detected in ham and process cheese.

L153 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:174680 HCAPLUS Full-text
DOCUMENT NUMBER: 98:174680
TITLE: Activity of captan and prochloraz on benomyl-sensitive and benomyl-resistant isolates on Monilinia fructicola
AUTHOR(S): Dijkhuizen, J. P.; **Ogawa, J. M.**; Manji, B. T.
CORPORATE SOURCE: Dep. Plant Pathol., Univ. California, Davis, CA, 95616, USA
SOURCE: Plant Disease (1983), 67(4), 407-9
CODEN: PLDIDE; ISSN: 0191-2917
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB A benomyl [17804-35-2]-resistant M. fructicola isolate grew as fast as a sensitive isolate on a medium free of fungicides but grew more slowly on a medium containing 10 μg/mL captan (I) [133-06-2] or 1 μg/mL prochloraz (II) [67747-09-5]. Conidial germination was inhibited by I but not by II. Yet when conidia exposed to fungicides were transferred onto a fungicide-free potato-dextrose agar (PDA) medium, spores exposed to 10 μg/mL I germinated and formed colonies, whereas conidia germinating in contrast with II made no further growth. Benomyl-resistant or -sensitive conidia germinated on PDA were not affected by exposure to II for 16 h, but exposure to II for 4 h severely reduced further germ-tube growth. Blossom blight on peaches was not reduced with a single spray of I applied at pink bud or initial petal fall, but application at pink bud followed by a spray at 75% petal fall reduced blossom blight equivalent to that of benomyl spray or combination of benomyl and II at pink bud. Effective disease control was provided by a single spray of II at pink bud, but not at

initial petal fall. Blighted blossoms sprayed with II had the fewest conidia. Peach **fruits** dipped in II failed to develop Monilinia decay when flesh surrounding the pit was inoculated with conidia, **indicating** systemic activity.

L153 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:578748 HCAPLUS Full-text
DOCUMENT NUMBER: 97:178748
TITLE: Additional aroma components of honeydew melon
AUTHOR(S): Buttery, Ron G.; Seifert, Richard M.; Ling, Louisa C.; Soderstrom, Edwin L.; **Ogawa, Joseph M.**; Turnbaugh, Jean G.
CORPORATE SOURCE: West. Reg. Res. Cent., USDA, Berkeley, CA, 94710, USA
SOURCE: Journal of Agricultural and Food Chemistry (1982), 30(6), 1208-11
CODEN: JAFCAU; ISSN: 0021-8561
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB In relation to the attraction of certain insect pests the volatile components of honeydew melon (Cucumis inodorus) were reinvestigated. Volatiles were isolated both by Tenax adsorbent trapping and by vacuum steam distillation continuous extraction Major aroma compds. identified, that had not been previously reported in melons, included (Z)-6-nonenyl acetate, (Z,Z)-3,6-nonadienyl acetate, (Z)-3-nonenyl acetate, 3-methyl-2-butenyl acetate, and Et (methylthio)acetate (CH3SCH2COOEt). Odor threshold detns. **indicated** that (Z)-6-nonenyl acetate could be an addnl. important contributor to the total aroma for humans.

L153 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:548227 HCAPLUS Full-text
DOCUMENT NUMBER: 93:148227
TITLE: Simultaneous analysis of **food** additives in **foods**. Part II. Determination of preservatives, butylhydroxyanisole and dibutylhydroxytoluene
AUTHOR(S): **Isshiki, Kenji**; Tsumura, Shusaku; Watanabe, Tadao
CORPORATE SOURCE: Kitakyushu Munic. Inst. Environ. Health Sci., Kitakyushu, 804, Japan
SOURCE: Agricultural and Biological Chemistry (1980), 44(7), 1601-7
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB A simple method was established for determining 10 preservatives, butylhydroxyanisole [25013-16-5], and dibutylhydroxytoluene [30587-81-6] in **food**. Steam distillation was carried out, and the distillate was trapped with CH2Cl2 and H2O. After acidification and addition of NaCl, **food** additives were extracted from the aqueous phase with CH2Cl2. The **food** additives were analyzed with a gas chromatograph equipped with a dual column system of 10% FFAP and 5% DEGS + 1% H3PO4. Column temperature was increased from 140 to 210° at the rate of 3°/min. Fluorene was used as an internal standard Et p-hydroxybenzoate [120-47-8] and isopropyl p-hydroxybenzoate [4191-73-5] were not separated with the FFAP column, but the other **food** additives were simultaneously determined with this column. With the DEGS + H3PO4 column, isobutyl p-hydroxybenzoate [4247-02-3] an d Pr p-hydroxybenzoate [94-13-3] were not separated, but the others were simultaneously determined Added recovery tests were carried out on about 38 **foods**.

L153 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:70665 HCAPLUS Full-text
DOCUMENT NUMBER: 90:70665
TITLE: Simultaneous determination of diphenyl and o-phenylphenol in citrus **fruits**

AUTHOR(S): **Isshiki, Kenji**; Tsumura, Shusaku; Watanabe, Tadao
CORPORATE SOURCE: Kitakyushu Munic. Inst. Environ. Health Sci., Kitakyushu, Japan
SOURCE: Agricultural and Biological Chemistry (1978), 42(12), 2375-9
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB A simple method for simultaneous determination of diphenyl [92-52-4] and o-phenylphenol [90-43-7] in citrus **fruits** was established. **Fruits** were distilled with a distillable oil analyzer. The citrus **fruit** extract was taken from this apparatus, and anthracene was added as an internal standard Gas chromatog. was carried out with a column packed with 10% FEAP and a flame ionization detector. Column temperature was increased from 150 to 210°. The retention times of di-**Ph**, o-phenylphenol and anthracene were 4.2, 14.0, and 15.4 min, resp. This method was completed within 2.5 h and applied to samples of grapefruit, lemons, oranges, navel oranges, ponkan, iyokan, hassaku, unshu mikan, and amanatsu mikan. In the recovery tests with these **fruits**, di-**Ph** was recovered in the range 90.1-96.6% and o-phenylphenol was recovered in the range 86.5-99.3%.

L153 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:599240 HCAPLUS Full-text
DOCUMENT NUMBER: 87:199240
TITLE: Analytical method for piperonyl butoxide in agricultural products. II. Determination by high-speed liquid chromatography
AUTHOR(S): **Isshiki, Kenji**; Tsumura, Shusaku; Watanabe, Tadao
CORPORATE SOURCE: Kita Kyushushi Kankyo Eisei Kenkyusho, Japan
SOURCE: Shokuhin Eiseigaku Zasshi (1977), 18(2), 159-63
CODEN: SKEZAP; ISSN: 0015-6426
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 12 May 1984
AB The method eliminated the extract purification step on fluorisil and silical gel columns, required for gas liquid chromatog. Hiachi Gel 3010 column with EtOH as a mobile phase was used. The excitation wavelength was 290 nm, and the anal. wavelength 340 nm for fluorescence monitor and at 290 nm for UV monitor. Thymol was the internal standard The sensitivity was 10 ng/ml. Average recoveries of piperonyl butoxide [51-03-6] from various grain croups were 79.8-102%.

L153 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:15458 HCAPLUS Full-text
DOCUMENT NUMBER: 82:15458
TITLE: Implication and chemical testing of two rhizopus fungi in softening of canned apricots
AUTHOR(S): **Ogawa, J. M.**; Rumsey, J.; Manji, B. T.; Tate, G.; Toyoda, J.; Bose, E.; Dugger, L.
CORPORATE SOURCE: Dep. Plant Pathol., Univ. California, Davis, CA, USA
SOURCE: California Agriculture (1974), 28(7), 6-7
CODEN: CAGRA3; ISSN: 0008-0845
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB A single **fruit** decayed by Rhizopus arrhizus and placed into a number 10 can of healthy **fruit** before canning led to total disintegration of healthy **fruit** during 6 months' storage at room temperature Addition of a single R. stolonifer-decayed **fruit** also resulted in significant softening within a 6-month period in **fruit** from one of 3 orchards. The addition of Botran (2,6-dichloro-4-nitroaniline) when the **fruit** was canned did not reduce softening. There was no correlation between **pH** and Rhizopus-induced softening.

L153 ANSWER 27 OF 31 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2007) on STN DUPLICATE 2
ACCESSION NUMBER: 81:33411 AGRICOLA Full-text
DOCUMENT NUMBER: IND81027561
TITLE: Simultaneous **analysis** of **food** additives in **foods**. III. Determination of diphenyl, O-phenylphenol and thiabendazole in citrus **fruits**.
AUTHOR(S): **Isshiki, K.**; Tsumura, S.; Watanabe, T.
AVAILABILITY: DNAL (385 AG8)
SOURCE: Nippon Nogei Kagakukai shi. = Journal of the Agricultural Chemical Society of Japan., **1980** Vol. 54, No. 12. p. 1045-1050 ill
Publisher: Tokyo, The Society.
NOTE: 21 ref.
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: Japanese
SUMMARY LANGUAGE: English

L153 ANSWER 28 OF 31 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 348653 FROSTI Full-text
TITLE: Temperature rising **indicators** over 7 or 13 C for **food**.
AUTHOR: Ohno S.; Tokuoka K.; **Isshiki K.**
SOURCE: Nippon Shokuhin Kogyo Gakkaishi, **1994**, 41 (4), 294-298 (14 ref.)
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
SUMMARY LANGUAGE: Japanese; English
ED 20011115
AB Two types of irreversible temperature **indicators** were developed in this study. These **indicators** were designed for use at 7 or 13 C for the quality control of **food** products and raw materials. Expansion of the colour zone of the **indicators** began at 7 or 13 C and the speed of expansion increased with increasing temperature. The relationship between the expansion of the colour zone and **bacterial** growth in the **food** was determined. It was found that both expansion of the colour zone and **bacterial** growth increased with rising temperature, the colour zone expansion occurring before **bacterial** growth. Use of these **indicators** for the quality regulation of **foods** and raw materials is proposed.

L153 ANSWER 29 OF 31 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 655334 FROSTI Full-text
TITLE: Method for evaluating qualities of **food** or drink and **indicator** therefor.
INVENTOR: **Isshiki K.; Ogawa J.**
PATENT ASSIGNEE: National Food Research Institute; Taisei Lamick Co. Ltd
SOURCE: European Patent Application
PATENT INFORMATION: EP 1482308 A1
WO 2003067254 20030814
APPLICATION INFORMATION: 20030206
PRIORITY INFORMATION: Japan **20020206; 20020610**
DOCUMENT TYPE: Patent
LANGUAGE: English
SUMMARY LANGUAGE: English
ED 20041220
AB A system to determine freshness or spoilage, particularly of **food** and drink products, is disclosed. It is claimed to be able to accurately detect the level of **microorganism** growth relative to temperature and time by enclosing the product with

gas-generating **microorganisms**, such as **yeasts**, fungi or **bacteria** in a fermentation base, in a sealed synthetic resin container or flexible film bag. The amount of gas generated and the formation of acid in the container serve as **indicators** of **microorganism** growth.

L153 ANSWER 30 OF 31 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 624350 FROSTI Full-text
TITLE: Method for evaluating qualities of **food** or drink and **indicator** therefor.
INVENTOR: **Isshiki K.; Ogawa J.**
PATENT ASSIGNEE: National Food Research Institute; **Yushin Giken** Co. Ltd
SOURCE: PCT Patent Application
PATENT INFORMATION: WO 2003067254 A1
APPLICATION INFORMATION: 20030206
PRIORITY INFORMATION: Japan **20020206; 20020610**
DOCUMENT TYPE: Patent
LANGUAGE: English
SUMMARY LANGUAGE: English
ED 20031208
AB A system to determine freshness or spoilage, particularly of **food** and drink products, is disclosed. It is claimed to be able to accurately detect the level of **microorganism** growth relative to temperature and time by enclosing the product with gas-generating **microorganisms**, such as **yeasts**, fungi or **bacteria** in a fermentation base, in a sealed synthetic resin container or flexible film bag. The amount of gas generated and the formation of acid in the container serve as **indicators** of **microorganism** growth.

L153 ANSWER 31 OF 31 FSTA COPYRIGHT 2007 IFIS on STN
ACCESSION NUMBER: 1986(09):T0038 FSTA Full-text
TITLE: [Estimation of daily intake of methylcellulose, CMC [carboxymethyl cellulose], polyphosphates and erythorbate according to the market basket studies in Japan.]
AUTHOR: Toyoda, M.; Yomota, C.; Ito, Y.; **Isshiki, K.**; Kato, T.; Kamikura, M.; Shiroishi, Y.; Nishijima, M.; Hayashi, H.; Fukasawa, Y.; Yokoyama, T.; Yoneda, M.; Hirayama, Y.; Yamamoto, Y.; Ichikawa, K.; Harada, M.
CORPORATE SOURCE: Nat. Inst. of Hygienic Sci., Osaka Branch, Osaka 540, Japan
SOURCE: Journal of Japanese Society of Nutrition and Food Science [Nihon Eiyo Shokuryo Gakkai-shi], (**1985**) 38 (1) 33-38, 8 ref.
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
SUMMARY LANGUAGE: English
UP 20020111
AB According to market basket studies proposed by the Ministry of Health and Welfare, the same kinds of **foods** were collected at Sapporo, Sendai, Tokyo, Kofu, Nagano, Osaka, Wakayama, Matsue and Kitakyushu in November 1983. They were divided into 8 groups of **foods** and contents of 6 kinds of **food** additives were **analysed**. Intakes of each **food** additive per capita per day were 1.57 mg of sodium erythorbate, 0 mg of methylcellulose, 7.47 mg of sodium CMC, 2.1 mg of pyrophosphate, 2.0 mg of tripolyphosphate and 5.2 mg of hexamethaphosphate. Total daily intakes of 30 kinds of **food** additives [determined in **foods** purchased from (i) a large supermarket, (ii) a middle class supermarket, (iii) local small supermarket and (iv) local retail shop] was 97.7 mg. **Food** additive content of **foods** from (iii) was 2.6x higher than those from (ii). [En tables included.]

TEXT SEARCH

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=> d his l124

     (FILE 'HCAPLUS' ENTERED AT 15:01:40 ON 03 JUL 2007)
               SAV L120 GIT870HCPIN/A
L124          34 S L123 NOT L120

=> d que l124
L3           123 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("NATIONAL FOOD
                 RESEARCH INSTITUTE JAPAN"/PA OR "YUSHIN GIKEN CO
                 LTD"/PA)
L5             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  124-38-9/RN
L6             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  1333-74-0/RN
L8        214855 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5
L9        509621 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 OR CARBON DIOXIDE
                 OR CO2
L11       328115 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6
L12        27430 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND (HYDROGEN OR
                 H2)(2A)GAS
L13              QUE  ABB=ON  PLU=ON  ISSHIKI K?/AU
L14              QUE  ABB=ON  PLU=ON  OGAWA J?/AU
L17              QUE  ABB=ON  PLU=ON  YUSHIN GIKEN?/PA,CS,SO,CO
L18            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 AND L14
L19          887 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L13 OR L14)
L20           76 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND (FOOD? OR
                 FEED OR DRINK?)
L21            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND (L3 OR L17)
L22        24850 SEA FILE=HCAPLUS ABB=ON  PLU=ON  INDICATORS+PFT,OLD,NT/
                 CT
L23        79523 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BEVERAGES+PFT,OLD,NT/C
                 T
L24        47461 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "FOOD ANALYSIS"+PFT,OL
                 D,NT/CT
L25        67685 SEA FILE=HCAPLUS ABB=ON  PLU=ON  FRUIT+PFT,OLD,NT/CT
L26        20063 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "FRUIT AND VEGETABLE
                 JUICES"+PFT,OLD,NT/CT
L27        93690 SEA FILE=HCAPLUS ABB=ON  PLU=ON  VEGETABLE+PFT,OLD,NT/C
                 T
L28       220043 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 OR L25 OR L26 OR
                 L27
L29              QUE  ABB=ON  PLU=ON  AEROGEN?
L30           72 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L28 AND L29
L31              QUE  ABB=ON  PLU=ON  FOOD? OR FEED? OR DRINK? OR BEV?
L32          314 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29 AND L31
L34            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 AND L22
L35      1485069 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CULTUR? OR MEDIUM
L36          360 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 OR L32
L37          124 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L35
L38              QUE  ABB=ON  PLU=ON  MICROORG?
L39           29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 AND L38
L40            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L22
L41            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 AND L24
L42              QUE  ABB=ON  PLU=ON  ?BACTER?
L43          120 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 AND L42
L44            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L43 AND (L22 OR L24)
L45              QUE  ABB=ON  PLU=ON  YEAST+PFT,OLD,NT/CT
L46            9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 AND L45
L47         4323 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "MOLD (FUNGUS)"+PFT,OL
                 D,NT/CT
L49              QUE  ABB=ON  PLU=ON  YEAST? OR MOLD? OR BACTER?
L50          221 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L28 AND L22
L51           55 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L50 AND L24
L52           11 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L51 AND (L38 OR L42
                 OR L45 OR L47 OR L49)
L54            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L52 AND (L9 OR L12)
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L55       40468 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "TEMPERATURE EFFECTS,
                BIOLOGICAL"+PFT,OLD,NT/CT
L56               QUE  ABB=ON  PLU=ON  GASES+PFT,OLD,NT/CT
L57               QUE  ABB=ON  PLU=ON  FUNGI+PFT,OLD,NT1/CT
L58        2836 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L27 OR L31) AND (L57
                OR L49 OR L45 OR L42 OR L38) AND (L24 OR L22)
L59          53 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND (L9 OR L12)
L60           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L59 AND ACID? AND L55

L61           6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L59 AND L55
L63        5948 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BUBBLE(3A)(SIZE OR
                SIZING OR DIMINSION?)
L65               QUE  ABB=ON  PLU=ON  BAGS+PFT,OLD,NT/CT
L66          30 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L34 OR (L40 OR L41)
                OR L44 OR L46 OR L52 OR L54 OR (L60 OR L61)
L67               QUE  ABB=ON  PLU=ON  (L56 OR L9 OR L12)(L)BUBBL?
L69               QUE  ABB=ON  PLU=ON  BUBBLES+PFT,OLD,NT/CT
L71     1137811 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L28 OR L31
L73       48696 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L71 AND (L67 OR L69
                OR L56 OR L9 OR L12)
L74         113 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L73 AND L65
L75           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L74 AND (L22 OR L24)
L76               QUE  ABB=ON  PLU=ON  BAG OR VESSEL OR CONTAINER?
L77        3174 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L73 AND L76
L78          59 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L77 AND (L22 OR L24)
L79               QUE  ABB=ON  PLU=ON  PH+PFT,OLD,NT/CT
L80           7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L78 AND L79
L81       45539 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L28 OR L31) AND (L79
                OR L22 OR L24)
L82          28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L81 AND L29
L83           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L82 AND (L69 OR L63
                OR L56 OR L9 OR L12)
L84        1065 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L81 AND (L69 OR L63
                OR L56 OR L9 OR L12)
L85          84 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L84 AND L55
L86          28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L85 AND (L35 OR L38
                OR L42 OR L45 OR L47 OR L49 OR L57 OR L29)
L87           4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L86 AND (L76 OR L65)
L88          24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L86 NOT L87
L89          78 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L34 OR (L40 OR L41)
                OR L44 OR L46 OR L52 OR L54 OR (L60 OR L61) OR L66 OR
                L75 OR L80 OR (L82 OR L83) OR (L86 OR L87 OR L88)
L91          46 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L89 AND (L22 OR L79)
L92          21 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L91 AND L24
L93          33 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L89 AND L29
L94          51 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L92 OR L93
L98          72 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L89 AND (L35 OR L38
                OR L45 OR L47 OR L49 OR L57)
L99          30 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L98 AND L29
L101         10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L98 AND (L76 OR L65)
L102         53 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L94 OR L99 OR L101
L103              QUE  ABB=ON  PLU=ON  PY<2003 OR PRY<2003 OR AY<2003 OR
                MY<2003 OR REVIEW/DT
L104         36 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L102 AND L103
L105         97 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 AND BUBBL?
L106          4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L105 AND L63
L107          4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 AND L63
L108          4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L107 OR L106
L109          2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L108 AND L103
L110         38 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L109 OR L104
L111              QUE  ABB=ON  PLU=ON  FOOD?/SC,SX
L112         29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L110 AND L111
L113          9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L110 NOT L112
L114          6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L113 AND L29
L115          1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L114 AND  AEROBACTER/T
                I AND PH/TI
L116         30 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L115 OR L112
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L117          53 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND (BEV? OR
                 FRUIT? OR VEG?)
L118         113 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L117 OR L20
L119          26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L118 AND (L29 OR L24
                 OR L22 OR INDICAT? OR PH)
L120          26 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L119 OR L18 OR L21
L121          35 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L116 OR L52
L122          35 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L121 OR L60
L123          36 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L122 OR L21
L124          34 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L123 NOT L120


=> d his l152

     (FILE 'AGRICOLA, FROSTI, FSTA' ENTERED AT 15:38:30 ON 03 JUL 2007)
L152          17 S L151 NOT L139

=> d que l152
L3           123 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("NATIONAL FOOD
                 RESEARCH INSTITUTE JAPAN"/PA OR "YUSHIN GIKEN CO
                 LTD"/PA)
L13              QUE  ABB=ON  PLU=ON  ISSHIKI K?/AU
L14              QUE  ABB=ON  PLU=ON  OGAWA J?/AU
L16              QUE  ABB=ON  PLU=ON  (L13 OR L14)
L17              QUE  ABB=ON  PLU=ON  YUSHIN GIKEN?/PA,CS,SO,CO
L29              QUE  ABB=ON  PLU=ON  AEROGEN?
L38              QUE  ABB=ON  PLU=ON  MICROORG?
L42              QUE  ABB=ON  PLU=ON  ?BACTER?
L49              QUE  ABB=ON  PLU=ON  YEAST? OR MOLD? OR BACTER?
L103             QUE  ABB=ON  PLU=ON  PY<2003 OR PRY<2003 OR AY<2003 OR
                 MY<2003 OR REVIEW/DT
L125      21919 SEA FOOD(3N) ANAL?
L127        346 SEA (FOOD OR FEED OR EDIBL? OR VEGETABL? OR FRUIT? OR
                 DRINK? OR BEV?) AND L29
L129          4 SEA L16 AND L125
L130        358 SEA L16
L131          2 SEA L130 AND (L3 OR L17)
L132          6 SEA L129 OR L131
L133        255 SEA L130 AND (FOOD OR BEV? OR FRUIT? OR VEG? OR
                 INDICAT? OR PH OR L29 OR L38 OR L42 OR L49 OR BUBBL?)
L134          4 SEA L133 AND L125
L137          5 SEA L133 AND INDICATOR?
L138          9 SEA L129 OR L131 OR L132 OR L134 OR L137
L139          7 SEA L138 AND L103
L146        312 SEA L127 AND (L38 OR L49)
L147       1646 SEA L125 AND (L38 OR L49)
L148       1955 SEA L146 OR L147
L149         88 SEA L148 AND INDICATOR?
L150         22 SEA L149 AND L29
L151         17 SEA L150 AND L103
L152         17 SEA L151 NOT L139


=> dup rem l124 l152
PROCESSING COMPLETED FOR L124
PROCESSING COMPLETED FOR L152
L154         44 DUP REM L124 L152 (7 DUPLICATES REMOVED)
                ANSWERS '1-33' FROM FILE HCAPLUS
                ANSWERS '34-37' FROM FILE AGRICOLA
                ANSWERS '38-39' FROM FILE FROSTI
                ANSWERS '40-44' FROM FILE FSTA
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TEXT SEARCH RESULTS

=> d l154 1-33 ibib ed abs hitind

L154 ANSWER 1 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2001:598168 HCAPLUS Full-text
DOCUMENT NUMBER: 135:192168
TITLE: Enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression
INVENTOR(S): Blatt, Lawrence; Mcswiggen, James; Chowrira, Bharat M.
PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 200 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001059103 A2		20010816	WO 2001-US4273	2001 0209

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR

PRIORITY APPLN. INFO.: US 2000-PV181797 20000211
US 2000-PV185516 20000228
US 2000-PV187128 20000306
ED Entered STN: 17 Aug 2001
AB The present invention relates to nucleic acid mols., including antisense and enzymic nucleic acid mols., such as hammerhead ribozymes, DNAzymes, and antisense oligonucleotides, which modulate the expression of the human CD20 and/or NOGO genes. The known sequences of human CD20 and NOGO mRNAs are screened for accessible sites using a computer-folding algorithm for regions that do not form secondary folding structures and thus may act as binding/cleaving sites. Thousands of target site and enzymic nucleic acid sequences are provided (hammerhead, Inozymes G-cleaver, Zinzymes Amberzymes, and DNAzymes). Several oncol. models in rodent, rabbit, and non-human primates are utilized to evaluate the therapeutic potential of anti-CD20 enzymic nucleic acids. Diagnostic systems and methods for detecting the presence of nucleic acids are further disclosed, using a ribozyme effector mol. and nucleic acid inhibitors complementary to the ribozyme and nucleic acid-based reporter mols. [This abstract record is the first of two records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].
IC ICM C12N015-11
ICS C12N009-00; A61K031-7088; C12Q001-68; C07H021-00
CC 7-3 (Enzymes)
Section cross-reference(s): 1, 3
IT **Beverages**
(anal. in; enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression)
IT **Bacteria (Eubacteria)**

Fungi
Mammal (Mammalia)
Virus
(detection of DNA or RNA in; enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression)
IT DNA sequences
Food analysis
Plant analysis
RNA sequences
Soil analysis
(enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression)
IT Chemiluminescent substances
Colorimetric indicators
Fluorescent indicators
Isotope indicators
(reporter mol. for detecting target nucleic acid; enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression)

L154 ANSWER 2 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:561502 HCAPLUS Full-text
DOCUMENT NUMBER: 146:517579
TITLE: Separation system and efficient capture of contaminants using magnetic nanoparticles
INVENTOR(S): Li, Yanbin; Varshney, Madhukar; Ye, Zunzhang
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 30pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2007114181	A1	20070524	US 2006-328808		2006 0109
PRIORITY APPLN. INFO.:			US 2005-642336P	P	2005 0107
			US 2005-642356P	P	2005 0107

ED Entered STN: 24 May 2007
AB Methods are disclosed for the capture, detection, separation, isolation and quantification of contaminants in a starting material. Also disclosed are competitive assay methods for the detection and quantification of contaminants in a starting material. Kits for use with the method are disclosed as well. A system for capturing, separating and/or concentrating contaminants from a material is also presented. The system captures, separates and/or concs. contaminants such as **bacteria**, viruses, other **microorganisms**, and/or larger items, such as insects, from a variety of materials, such as food, and environmental and clin. materials. In general, the system uses a rotating magnetic field to mix the material with magnetic particles to capture the target contaminants, and a fixed magnetic field to sep. and concentrate the captured target contaminants.
INCL 210695000; 436020000; 436056000; 435173100
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 10, 14, 17
IT **Fluorescent indicators**
(Quantum dots biolabeling; separation system and efficient capture of contaminants using magnetic nanoparticles)

IT Analysis
Animal tissue
Antibiotic resistance
Biosensors
Chemicals
Clinical analysis
Communication
Concentration (process)
Configuration
Control apparatus
Dairy products
Emission spectra
Environmental pollution
Escherichia coli
Eubacteria
Eukaryota
Feces
Feed contamination
Food
Food contamination
Fruit
Herbicides
Homogenization
Human
Immunoassay
Insecta
Linking agents
Listeria monocytogenes
Magnetic particles
Microbiology
Microorganism
Milk analysis
Mixing
Nanoparticles
Organ, animal
PCR (polymerase chain reaction)
Pesticides
Prokaryota
Salmonella
Separation
Separators
Skin
Solutions
Test kits
Vegetable
Virus
(separation system and efficient capture of contaminants using magnetic nanoparticles)

L154 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:544919 HCAPLUS Full-text
DOCUMENT NUMBER: 144:487621
TITLE: **Food** freshness sensor
INVENTOR(S): Morris, Roger J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. Ser. No. 799,312.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006121165	A1	20060608	US 2005-295136	

				2005 1206
			<--	
US 2004115319	A1	20040617	US 2003-659222	
				2003 0910
			<--	
US 2004265440	A1	20041230	US 2004-799312	
				2004 0312
			<--	
WO 2006062870	A2	20060615	WO 2005-US43843	
				2005 1206
WO 2006062870	A3	20061116		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:	US 2002-411068P	P	2002 0916
		<--	
	US 2002-421699P	P	2002 1028
		<--	
	US 2003-484869P	P	2003 0703
	US 2003-659222	A2	2003 0910
	US 2004-799312	A2	2004 0312
	US 2004-633750P	P	2004 1207

ED Entered STN: 09 Jun 2006

AB A sensor for detecting the presence of **bacteria** in a perishable **food** includes a pH-sensitive solution of bromothymol blue and methyl red mixed with an alkaline resulting in a pH value and a generally green color changing to a generally orange color responsive to exposure to a concentration of **carbon dioxide**. The solution is packaged in a gas permeable **container** using a TPX (PMP) thin film that allows an effective diffusion of **carbon dioxide** through the **container**. The pH level drops when acidic **carbon dioxide** comes into contact with the solution resulting from a formation of carbonic acid, making the solution an indicator of **carbon dioxide** concentration, and thus an indication of **bacterial** growth.

INCL 426383000

CC 17-1 (**Food** and Feed Chemistry)

ST **bacteria food** freshness sensor **carbon dioxide**; bromothymol blue methyl red **food** freshness indicator

IT **Acid-base indicators**
Antifreeze
Food packaging
Gas sensors
pH
(**carbon dioxide** sensor for detection of spoilage **bacteria** in packaged **food**)
IT Eubacteria
(spoilage; **carbon dioxide** sensor for detection of spoilage **bacteria** in packaged **food**)
IT 107-21-1, Ethylene glycol, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(antifreeze agent; **carbon dioxide** sensor for detection of spoilage **bacteria** in packaged **food**)
IT **124-38-9**, **Carbon dioxide**, analysis
RL: ANT (Analyte); ANST (Analytical study)
(**carbon dioxide** sensor for detection of spoilage **bacteria** in packaged **food**)
IT 76-59-5, Bromothymol blue 493-52-7, Methyl red 1310-73-2, Sodium hydroxide, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**carbon dioxide** sensor for detection of spoilage **bacteria** in packaged **food**)
IT 25068-26-2, TPX
RL: DEV (Device component use); FFD (Food or feed use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(**carbon dioxide** sensor for detection of spoilage **bacteria** in packaged **food**)

L154 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:673464 HCAPLUS Full-text
DOCUMENT NUMBER: 143:152252
TITLE: Method and system for colorimetric determination of a chemical or physical property of a turbid medium
INVENTOR(S): Houlberg, Ulf; Herbsleb, Peer; Sturino, Joseph
PATENT ASSIGNEE(S): Chr. Hansen A/S, Den.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068982	A1	20050728	WO 2005-DK27	20050117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2553810	A1	20050728	CA 2005-2553810	

2005
0117
EP 1709430 A1 20061011 EP 2005-700577
2005
0117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
PRIORITY APPLN. INFO.: US 2004-536832P P
2004
0116
WO 2005-DK27 W
2005
0117

ED Entered STN: 29 Jul 2005

AB A new method and a system for the simultaneous determination of a biol., chemical and(or) phys. property of individual turbid samples is described. The invention relates to a system and colorimetric method for simultaneous determination and measuring properties, such as acidification or pH value, redox potentials, viscosity, diffusion, enzymic activity, etc. of individual turbid or opaque samples such as, e.g., milk, whey and related products. In particular, this relates to a method for non-invasively and(or) non-destructively scanning samples or an array of samples, and determine on the basis of the scanning a specific property, such as pH, of the samples. The method may also be used for multivariate detns. of chemical and(or) phys. properties. Thus, samples are arranged in an array (e.g., microtiter plates) and a color indicator (e.g., ruthenium red to characterize yogurt texture) is allowed to interact with the samples, digital images of the color developed are captured, and digital values are obtained to calculate the value of the appropriate property.

IC ICM G01N021-78
ICS G01N021-25; G01N021-27; G01N033-04

CC 17-1 (Food and Feed Chemistry)
Section cross-reference(s): 9

IT **Bacteriophage**
(lactic acid **bacteria**; method and system for colorimetric determination of chemical or phys. property of turbid medium)

IT **Acid-base indicators**
Beverages
Blood analysis
Colorimeters
Colorimetry
Computer application
Computer program
Dairy products
Diffusion
Food texture
Food viscosity
Fruit and vegetable juices
Imaging
Latex
Mayonnaise
Memory devices
Microorganism
Microtiter plates
Milk analysis
Multivariate analysis
Opacity
Redox potential
Robotics
Salad dressings
Spices
Turbidity
Whey
Yeast
(method and system for colorimetric determination of chemical or phys. property of turbid medium)

IT Lactic acid **bacteria**
(phage infection of; method and system for colorimetric determination of chemical or phys. property of turbid medium)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 5 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:252732 HCAPLUS Full-text
DOCUMENT NUMBER: 140:286518
TITLE: **Food**-borne pathogen and spoilage detection device and method
INVENTOR(S): Morris, Roger; Mcmorris, John A., III; Acosta, Galo; Hill, Jerry; Tank, Alan R.; Bishop, Alan; Newman, Kyle
PATENT ASSIGNEE(S): Agcert International, Llc, USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004025254	A2	20040325	WO 2003-US28497	2003 0910
			<--	
WO 2004025254	A3	20041007		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2499145	A1	20040325	CA 2003-2499145	2003 0910
			<--	
AU 2003267129	A1	20040430	AU 2003-267129	2003 0910
			<--	
EP 1546365	A2	20050629	EP 2003-749605	2003 0910
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005538740	T	20051222	JP 2004-571985	2003 0910
			<--	
PRIORITY APPLN. INFO.:			US 2002-411068P P	2002 0916
			<--	
			US 2002-421699P P	

			2002 1028
	<--		
	US 2003-484869P	P	
			2003 0703
	WO 2003-US28497	W	
			2003 0910

ED Entered STN: 26 Mar 2004

AB A device for detecting **bacteria** in a perishable **food** product includes a gas-permeable sensor housing positionable within an interior of **food** packaging. A pH indicator is positioned within the housing for detecting a change in a gaseous **bacterial** metabolite concentration that is indicative of **bacterial** growth, wherein a pH change is effected by a presence of the metabolite. The housing and the pH indicator are preferably safe for human consumption. A method for detecting **bacteria** in a perishable **food** product includes supporting a **food** product by a **food** packaging element and positioning a gas-permeable sensor housing within an interior of the **food** packaging element, the sensor including a pH indicator. The **food** product and the housing are sealed within the **food** packaging, and pH indicator is monitored for **bacterial** concentration in the **food** product in excess of a predetd. level.

IC ICM G01N

CC 17-1 (**Food** and Feed Chemistry)

ST pathogen **food** spoilage packaging sensor pH indicator

IT **Food**
(dyes; **food**-borne pathogen and spoilage detection device and method)

IT Packaging materials
(films; **food**-borne pathogen and spoilage detection device and method)

IT **Acid-base indicators**
Colorimetric indicators
Eubacteria
Fluorescence
Food
Food analysis
Food packaging
Luminescence
Optical absorption
Pathogen
Sensors
Temperature effects, biological
UV radiation
pH
(**food**-borne pathogen and spoilage detection device and method)

IT Volatile organic compounds
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(**food**-borne pathogen and spoilage detection device and method)

IT Polysiloxanes, uses
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(**food**-borne pathogen and spoilage detection device and method)

IT Dyes
(**food**; **food**-borne pathogen and spoilage detection device and method)

IT **Containers**
(transparent; **food**-borne pathogen and spoilage detection device and method)

IT **124-38-9**, **Carbon dioxide**, biological studies

RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(**food**-borne pathogen and spoilage detection device and method)

IT 76-59-5, Bromothymol blue 143-74-8, Phenol red 1305-62-0, Calcium hydroxide, uses 1733-12-6, Cresol red
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PYP (Physical process); ANST (Analytical study); PROC (Process); USES (Uses)
(**food**-borne pathogen and spoilage detection device and method)

IT 9002-18-0, Agar
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(**food**-borne pathogen and spoilage detection device and method)

L154 ANSWER 6 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:633964 HCAPLUS Full-text
DOCUMENT NUMBER: 139:192428
TITLE: Methods for specific rapid detection of pathogenic food-relevant **bacteria**
INVENTOR(S): Snaidr, Jiri; Beimfohr, Claudia
PATENT ASSIGNEE(S): Vermicon AG, Germany
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066893	A1	20030814	WO 2003-EP1092	2003 0204 <--
WO 2003066893	A8	20041007		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2474957	A1	20030814	CA 2003-2474957	2003 0204 <--
AU 2003206830	A1	20030902	AU 2003-206830	2003 0204 <--
EP 1472370	A1	20041103	EP 2003-704530	2003 0204 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

JP 2005516627	T	20050609	JP 2003-566241	2003 0204 <--
US 2005123946	A1	20050609	US 2004-909757	2004 0802 <--
PRIORITY APPLN. INFO.:			DE 2002-10204447	A 2002 0204 <--
			WO 2003-EP1092	W 2003 0204

ED Entered STN: 15 Aug 2003

AB The invention relates to a method for the detection of pathogenic food-relevant **bacteria**, particularly to a method for simultaneous specific detection of **bacteria** of the genus Listeria and the species Listeria monocytogenes by in situ-hybridization and to a method for specific detection of **bacteria** of the species Staphylococcus aureus by in situ hybridization in addition to a method for simultaneous specific detection of **bacteria** of the genus **Campylobacter** and the species C. coli and/or C. jejuni by in situ- hybridization. The invention also relates to corresponding oligonucleotide probes and kits with which the inventive methods can be carried out.

IC ICM C12Q001-68
ICS C12N015-11

CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 10, **17**

ST FISH kit DNA probe detection pathogenic **bacteria** food

IT Test kits
(DNA probes, hybridization, washing and fixation solns. containing; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Toxins
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(TSST-1 gene; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Meat
(chicken; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Flours and Meals
(corn; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Zea mays
(flour and meal; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Probes (nucleic acid)
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fluorescent dye labeled; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT **Eubacteria**
(food-spoiling; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Nucleic acid hybridization
(in situ, fluorescence; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Microscopy
(light or epifluorescence; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Chemiluminescence
(measurement; methods for specific rapid detection of pathogenic food-relevant **bacteria**)

IT Butter

Campylobacter
Campylobacter coli
Campylobacter jejuni
Cheese
Flow cytometry
Fluorometry
Food analysis
Food contamination
Listeria
Listeria monocytogenes
Pathogenic **bacteria**
Staphylococcus aureus
(methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT Epidemiology
(mol.; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT Seafood
(mussels; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT **Beverages**
Cosmetics
(pathogenic **bacteria** in; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT Meat
(pork; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT **Fluorescent indicators**
(probes labeled with; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT Fish
(products; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT **Brassica oleracea capitata**
(salad; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT 581819-40-1 581819-41-2 581819-42-3 581819-43-4
581819-44-5 581819-45-6 581819-46-7 581819-47-8
581819-48-9 581819-49-0 581819-50-3 581819-51-4
581819-52-5 581819-53-6 581819-54-7 581819-55-8
581819-56-9 581819-57-0 581819-58-1 581819-59-2
581819-60-5 581819-61-6 581819-62-7 581819-63-8
581819-64-9 581819-65-0 581819-66-1 581819-67-2
581819-68-3 581819-69-4 581819-70-7 581819-71-8
581819-72-9 581819-73-0 581819-74-1 581819-75-2
581819-76-3 581819-77-4 581819-78-5 581819-79-6
581819-80-9 581819-81-0 581819-82-1 581819-83-2
581819-84-3 581819-85-4 581819-86-5 581819-87-6
581819-88-7
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DNA probe; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
IT 581822-26-6 581822-27-7
RL: PRP (Properties)
(unclaimed sequence; methods for specific rapid detection of pathogenic food-relevant **bacteria**)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 7 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:524000 HCAPLUS Full-text
DOCUMENT NUMBER: 139:52033
TITLE: Method and apparatus for detecting **bacteria**

INVENTOR(S): Freadman, Marv; Beach, Howard C.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6589761	B1	20030708	US 2000-661349 <--	2000 0914
CA 2423832	A1	20031206	CA 2003-2423832 <--	2003 0402
PRIORITY APPLN. INFO.:			US 1999-140052P P <--	1999 0619

ED Entered STN: 09 Jul 2003

AB A device and method for detecting **bacteria** in **food** substances and the like utilizing a three layer composite consisting of a transparent base, an indicator exhibiting color change when exposed to changes in pH, and a gas permeable cover placeable in proximity to the substance. The method utilizes the generation of **CO2** gas as a byproduct of **bacterial** growth which produces carbonic acid lowering the pH of the substance in the region of the composite resulting in an observable color change as in indication of the presence of **bacteria**.

IC ICM C12Q001-02
ICS C12Q001-18; G01N033-53
INCL 435029000; 435032000; 435287500; 435283100; 435807000; 435287100; 435968000
CC 17-1 (**Food** and Feed Chemistry)
Section cross-reference(s): 10
ST app detecting **bacteria**
IT **Indicators**
(Irreversible; method and apparatus for detecting **bacteria**)
IT **Indicators**
(Luminescent; method and apparatus for detecting **bacteria**)
IT **Indicators**
(Plant derived; method and apparatus for detecting **bacteria**)
IT **Indicators**
(Universal; method and apparatus for detecting **bacteria**)
IT Permeability
(gas; method and apparatus for detecting **bacteria**)
IT **Acid-base indicators**
Analytical apparatus
Color
Colorimetric indicators
Colorimetry
Composites
Concentration (condition)
Containers
Eubacteria
Fluorescent indicators
Food analysis
Gels
Growth, microbial
Indicators
Lids
Liquids

pH
(method and apparatus for detecting **bacteria**)
IT **Food** packaging materials
(wrap, sheet; method and apparatus for detecting **bacteria**)
IT **124-38-9**, **Carbon dioxide**, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(method and apparatus for detecting **bacteria**)
IT 463-79-6, Carbonic acid, formation (nonpreparative) 12408-02-5, Hydrogen ion, formation (nonpreparative)
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(method and apparatus for detecting **bacteria**)
IT 7732-18-5, Water, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(method and apparatus for detecting **bacteria**)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 8 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:185360 HCAPLUS Full-text
DOCUMENT NUMBER: 136:196589
TITLE: **Culture medium** and method for identifying gram-negative **microorganisms**
INVENTOR(S): Rodriguez Martinez, Claudio; Quesada Muniz, Vivian de Jesus; Zhurbenko, Raisa
PATENT ASSIGNEE(S): Centro Nacional de Biopreparados, Cuba
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020829	A1	20020314	WO 2001-CU6	2001 0824
			<--	
W: BR, CA, JP, MX, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2421436	A1	20030306	CA 2001-2421436	2001 0824
			<--	
EP 1323832	A1	20030702	EP 2001-964834	2001 0824
			<--	
EP 1323832	B1	20060705		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2001013717	A	20040217	BR 2001-13717	2001 0824
			<--	
AT 332395	T	20060715	AT 2001-964834	2001 0824
			<--	
RU 2286392	C2	20061027	RU 2003-109616	2001

				0824
			<--	
EG 22938	A	20020113	EG 2001-957	
				2001
				0905
			<--	
US 2004029212	A1	20040212	US 2003-363139	
				2003
				0522
			<--	
PRIORITY APPLN. INFO.:			CU 2000-195	A
				2000
				0907
			<--	
			WO 2001-CU6	W
				2001
				0824
			<--	

ED Entered STN: 15 Mar 2002

AB The invention relates to a novel **culture medium** and a method for the identification of gram-neg. **microorganisms** based on the differentiation of said **microorganisms** by the appearance of 10 different colors in the colonies, which may be regular or irregular, and halos of at least 5 different colors and sizes. Said **medium** comprises a mixture of components favoring the appearance of halos of different colors and sizes and consists of siliceous earth, skim milk, starches and activated carbon. The **medium** according to the invention also comprises a mixture of nutritional bases, substances ensuring the appearance of different colorations in the colonies, substances ensuring inhibition of gram-pos. **microorganisms** and substances providing the necessary solid matrix for the growth and development of the colonies.

IC ICM C12Q001-04
ICS C12R001-04; C12R001-19; C12R001-22; C12R001-37; C12R011-85; C12R001-42

CC 9-11 (Biochemical Methods)
Section cross-reference(s): 10, **17**

ST gram neg **microorganism culture medium**

IT Aeromonas hydrophila
Antibiotics
Citrobacter freundii
Culture media
Enterobacter aerogenes
Enterobacter cloacae
Food analysis
Klebsiella pneumoniae
Microorganism
Proteus mirabilis
Proteus vulgaris
Pseudomonas aeruginosa
Salmonella choleraesuis
Salmonella schottmuelleri
Salmonella typhi
Salmonella typhimurium
Serratia marcescens
Serratia odorifera
Soil analysis
(**culture medium** and method for identifying gram-neg. **microorganisms**)

IT Peptones
Siliceous earths
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(**culture medium** and method for identifying gram-neg. **microorganisms**)

IT **Yeast**
(extract; **culture medium** and method for identifying gram-neg. **microorganisms**)

IT Glycosides
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(glucuronides; **culture medium** and method

for identifying gram-neg. **microorganisms**)
IT Milk
(skim; **culture medium** and method for identifying gram-neg. **microorganisms**)
IT 7440-44-0, Carbon, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(activated; **culture medium** and method for identifying gram-neg. **microorganisms**)
IT 83-44-3, Deoxycholic acid 143-74-8, Phenol red 151-21-3, Sodium dodecylsulfate, analysis 9002-18-0, Agar 9005-25-8, Starch, analysis 9031-11-2, β-Galactosidase 65589-70-0, Acriflavine
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(**culture medium** and method for identifying gram-neg. **microorganisms**)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:10723 HCAPLUS Full-text
DOCUMENT NUMBER: 136:69070
TITLE: Nutritional mixture and method for early identification and count of gram-negative organisms
INVENTOR(S): Tsoraeva, Anna; Rodriguez Martinez, Claudio; Quesada Muniz, Vivian de Jesus
PATENT ASSIGNEE(S): Centro Nacional de Biopreparados, Cuba
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000921	A1	20020103	WO 2001-CU4	2001 0629
			<--	
W: BR, CA, JP, MX, RU, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2414485	A1	20021227	CA 2001-2414485	2001 0629
			<--	
EP 1300471	A1	20030409	EP 2001-947123	2001 0629
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2001012005	A	20030513	BR 2001-12005	2001 0629
			<--	
JP 2004501654	T	20040122	JP 2002-506235	2001 0629
			<--	
RU 2275429	C2	20060427	RU 2003-102442	2001 0629

			<--	
EG 23045	A	20040131	EG 2001-713	2001 0701
			<--	
US 2003170773	A1	20030911	US 2003-312348	2003 0503
			<--	
PRIORITY APPLN. INFO.:			CU 2000-160 A	2000 0629
			<--	
			WO 2001-CU4 W	2001 0629
			<--	

ED Entered STN: 04 Jan 2002

AB The invention relates to the field of microbiol., more particularly to a nutritional mixture and to a method for early identification and count of gram-neg. **microorganisms**. Five different colors, three-colored fluorescent emissions, three-colored halos and opaque precipitation zones around the colonies appear in the **culture medium** depending on the **microorganism** in question. This makes it possible to establish differentiation with a high degree of sensitivity and specificity. The mixture comprises specific ratios of protein fractions that are rich in free or combined tryptophan, organic and/or inorg. salts, substances that provide color or fluorescence, growth inhibitors of gram-pos. organisms, in addition to cellulose and hemicellulose and other components which provide the solid structure of the **culture medium**.

IC ICM C12Q001-04
ICS C12Q001-04; C12R001-05; C12R001-19; C12R001-22; C12R001-37; C12R001-385; C12R001-42

CC 17-1 (**Food** and Feed Chemistry)

ST gram neg **bacteria** identification **food**

IT Fluorescence
(UV; nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Aeromonas hydrophila
Alcaligenes
Citrobacter freundii
Colorimetric indicators
Colorimetry
Culture media
Drinking waters
Enterobacter
Enterobacter aerogenes
Enterobacter cloacae
Escherichia coli
Fluorescent indicators
Fluorometry
Food analysis
Gram-negative **bacteria**
Klebsiella pneumoniae
Pantoea agglomerans
Proteus (**bacterium**)
Proteus vulgaris
Providencia
Pseudomonas aeruginosa
Salmonella
Salmonella typhi
Salmonella typhimurium
Shigella flexneri
Shigella sonnei
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Protein hydrolyzates

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Bile salts
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Caseins, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Salts, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Salts, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(organic; nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT **Yeast**
(protein extract; nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT Proteins
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(tryptophan-high; nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT 50-70-4, Sorbitol, uses 553-24-2, Neutral red 6160-80-1 7240-90-6, X-GAL
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

IT 73-22-3, L-Tryptophan, analysis 113-24-6, Sodium pyruvate 302-95-4, Sodium deoxycholate 497-19-8, Sodium carbonate, analysis 7647-14-5, Sodium chloride, analysis 7758-11-4, Dipotassium phosphate 7778-77-0, Monopotassium phosphate 7783-20-2, Ammonium sulfate, analysis 9004-34-6, Cellulose, analysis 9004-70-0, Cellulose nitrate 9012-36-6, Agarose 9034-32-6, Hemicellulose 9046-34-8, Agaropectin
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(nutritional mixture and method for early identification and count of gram-neg. organisms in **food**, water and other nutritional compns.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 10 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:295653 HCAPLUS Full-text
DOCUMENT NUMBER: 137:46277
TITLE: Comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**
AUTHOR(S): Leclercq, A.; Wanegue, C.; Baylac, P.
CORPORATE SOURCE: Pole Sante-Aliment-Nutrition, Institut Pasteur de Lille, Villeneuve d'Ascq, F-59651, Fr.
SOURCE: Applied and Environmental Microbiology (**2002**), 68(4), 1631-1638

CODEN: AEMIDF; ISSN: 0099-2240
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Apr 2002

AB A 24-h direct plating method for fecal coliform enumeration with a resuscitation step (preincubation for 2 h at 37 ± 1°C and transfer to 44 ± 1°C for 22 h) using fecal coliform agar (FCA) was compared with the 24-h standardized violet red bile lactose agar (VRBL) method. FCA and VRBL have equivalent specificities and sensitivities, except for lactose-pos. non-fecal coliforms such as Hafnia alvei, which could form typical colonies on FCA and VRBL. Recovery of cold-stressed Escherichia coli in mashed potatoes on FCA was about 1 log unit lower than that with VRBL. When the FCA method was compared with standard VRBL for enumeration of fecal coliforms, based on counting carried out on 170 different **food** samples, results were not significantly different ($P > 0.05$). Based on 203 typical identified colonies selected as found on VRBL and FCA, the latter **medium** appears to allow the enumeration of more true fecal coliforms and has higher performance in certain ways (specificity, sensitivity, and neg. and pos. predictive values) than VRBL. Most colonies clearly identified on both **media** were E. coli and H. alvei, a non-fecal coliform. Therefore, the replacement of fecal coliform enumeration by E. coli enumeration to estimate **food** sanitary quality should be recommended.

CC 17-1 (**Food** and Feed Chemistry)
Section cross-reference(s): 10
ST fecal coliform enumeration **food culture medium**

IT Meat
(beef, minced; comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**)

IT Bioindicators
Cheese
Citrobacter freundii
Citrobacter koseri
Coliform **bacteria**
Enterobacter aerogenes
Enterobacter amnigenus
Enterobacter cloacae
Enterobacter sakazakii
Escherichia coli
Food analysis
Food contamination
Growth, microbial
Hafnia alvei
Klebsiella oxytoca
Klebsiella pneumoniae
Klebsiella pneumoniae pneumoniae
Pantoea agglomerans
Proteus vulgaris
Salmonella derby
Salmonella enteritidis
Salmonella montevideo
Salmonella newport
Salmonella typhimurium
Serratia marcescens
Serratia proteamaculans proteamaculans
Shigella sonnei
Temperature effects, biological
Vegetable
Yersinia enterocolitica
Yersinia frederiksenii
Yersinia intermedia
(comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**)

IT Escherichia coli
(enteropathogenic, O157:H7; comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**)

IT Meat
(sausage; comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**)
IT **Culture media**
(selective; comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**)
IT Salmonella enterica
(serovar Virchow; comparison of fecal coliform agar and violet red bile lactose agar for fecal coliform enumeration in **foods**)
REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 11 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:383643 HCAPLUS Full-text
DOCUMENT NUMBER: 138:105768
TITLE: Specific detection of Stenotrophomonas maltophilia strains in albacore tuna (Thunnus alalunga) by reverse dot-blot hybridization
AUTHOR(S): Ben-Gigirey, Begona; Vieites, Juan M.; Kim, Shin H.; An, Haejung; Villa, Tomas G.; Barros-Velazquez, Jorge
CORPORATE SOURCE: Facultad de Veterinaria, Departamento de Quimica Analitica, Nutricion y Bromatologia, Universidad de Santiago de Compostela, Lugo, E-27002, Spain
SOURCE: Food Control (**2002**), 13(4-5), 293-299
CODEN: FOOCEV; ISSN: 0956-7135
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 May 2002
AB A reverse dot-blot DNA/DNA hybridization method coupled with a non-radioactive nucleic acid detection system was evaluated for the direct detection of the emerging pathogen Stenotrophomonas maltophilia in albacore tuna, a fish species of high com. value in Europe and the US. Probes consisting of total genomic DNA of S. maltophilia, when used in dot-blot hybridization assays, differed in a sufficient way with respect to Morganella morganii, Enterobacter **aerogenes** Enterobacter agglomerans, Klebsiella planticola, Acinetobacter baumani and other **bacteria** frequently isolated from spoiled tuna fish species, as to allow its specific detection in exts. of albacore tuna. The introduction of an enrichment step prior to DNA isolation and labeling allowed the successful detection of 102 viable cells of S. maltophilia in 1 mL of artificially-contaminated albacore muscle exts. with no cross-hybridization with other Gram-neg. competing microflora being observed The detection strategy described in this work may be useful for the detection and control of S. maltophilia in tuna fish species and seafood products.
CC 17-1 (**Food** and Feed Chemistry)
IT **Food analysis**
Food contamination
Stenotrophomonas maltophilia
Thunnus alalunga
(specific detection of Stenotrophomonas maltophilia strains in albacore tuna (Thunnus alalunga) by reverse dot-blot hybridization)
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:158584 HCAPLUS Full-text
DOCUMENT NUMBER: 138:270561
TITLE: Quality determination of eggs and liquid eggs through NMR-spectroscopy
AUTHOR(S): Honikel, K. O.; Schwagele, F.; Poser, R.;

Krockel, L.
CORPORATE SOURCE: Institut fuer Chemie und Physik, Bundesanstalt fuer Fleischforschung, Kulmbach, Germany
SOURCE: Diskussionstagung - Forschungskreis der Ernaehrungsindustrie e.V. (2002), 60th(Forschung im Dienste der Lebensmittelqualitaet), 83-103
CODEN: DFERFA; ISSN: 0532-2413
PUBLISHER: Forschungskreis der Ernaehrungsindustrie e.V.
DOCUMENT TYPE: Journal
LANGUAGE: German
ED Entered STN: 03 Mar 2003
AB Low-resolving NMR spectroscopy was used to determine the freshness of intact eggs on the basis of . Two transversal (spin-spin) relaxation times T2(1) and T2(2) were measured. The alteration of T2(2) during storage was dependent on the temperature The T2(1) values were temperature-dependent from d 7 upwards. A good correlation was found with the Haugh units. The influence was measured of increasing the partial pressure of **CO2**. The relaxaton time T2(2) was increased during the first wk of storage. The increase of pH during storage was avoided by **CO2** atmosphere. The effect of microbial contamination of eggs on the relaxation times was discussed.
CC 17-7 (**Food** and Feed Chemistry)
IT Atmosphere (environmental)
Egg, poultry
Egg white
Egg yolk
Food analysis
Microorganism
NMR spectroscopy
Quality control
Storage
Temperature effects, biological
pH
(quality determination of eggs and liquid eggs through NMR-spectroscopy)
IT **124-38-9, Carbon dioxide**, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(quality determination of eggs and liquid eggs through NMR-spectroscopy)
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 13 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:677066 HCAPLUS Full-text
DOCUMENT NUMBER: 135:223797
TITLE: The detection and removal of **microorganism** contamination
INVENTOR(S): Potts, Steven J.; Slaughter, David C.; Thompson, James F.; Payne, Jennifer J.; Kohn, Barb Ariel
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001067102	A2	20010913	WO 2001-US6774	2001 0302
			<--	
WO 2001067102	A3	20020510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,

CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,
NE, SN, TD, TG

US 6770453	B1	20040803	US 2000-519533	2000 0306 <--
US 2002107179	A1	20020808	US 2001-759815	2001 0110 <--
US 6833250	B2	20041221		
CA 2402157	A1	20010913	CA 2001-2402157	2001 0302 <--
EP 1261872	A2	20021204	EP 2001-913259	2001 0302 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
MX 2002PA08679	A	20030224	MX 2002-PA8679	2002 0905 <--

PRIORITY APPLN. INFO.:	US 2000-519533	A	2000 0306 <--
	US 2001-759815	A	2001 0110 <--
	WO 2001-US6774	W	2001 0302 <--

ED Entered STN: 14 Sep 2001

AB This invention provides novel methods for the detection of chitinous contaminants of non-chitinous biol. materials. The methods are accurate, highly reproducible, rapid and relatively inexpensive. The methods are well suited to com. applications, particularly in the food and agriculture industry where biol. materials (e.g. food products) are regularly screened for contaminants (e.g. insect, **mold**, fungus, etc.). In one embodiment, the methods involve contacting a biol. sample with a probe that is a lectin that binds chitin, contacting the sample with a pectinase; and detecting binding of said lectin to chitin where the binding indicates the presence of chitin in the biol. sample.

IC ICM G01N033-53
ICS G01N033-569; C12Q001-34; G01N021-64

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 10, **17**

ST detection **microorganism** contamination

IT Centrifuges
(Flow-through; detection and removal of **microorganism** contamination)

IT Fluorometers
(Surface-reading; detection and removal of **microorganism** contamination)

IT Interface
(Transparent; detection and removal of **microorganism**

contamination)
IT Optical filters
(bandpass; detection and removal of **microorganism** contamination)
IT Agriculture and Agricultural chemistry
Alternaria
Alternaria alternata
Animal
Animal tissue
Apple
Arthropod (Arthropoda)
Ascomycete (Ascomycota)
Barley
Basidiomycete (Basidiomycota)
Berry
Biological materials
Blanching
Botrytis
Botrytis cinerea
Centrifugation
Centrifuges
Cereal (grain)
Chytridiomycota
Cladosporium
Cladosporium herbarum
Colorimetric indicators
Concentration (process)
Containers
Crustacean (Crustacea)
Evaporation
Fermentation
Filtration
Flower
Fluorescence
Fluorescent substances
Fluorometers
Fluorometry
Food analysis
Food contamination
Forage
Freeze drying
Freezing
Fruit
Fruit and vegetable juices
Fungi
Fusarium
Fusarium oxysporum
Geotrichum
Geotrichum candidum
Grape
Heating
Homogenization
Illumination
Insect (Insecta)
Isotope indicators
Lemon (Citrus limon)
Magnetic materials
Microorganism
Mold (fungus)
Oomycetes
Orange
Pepper (Piper)
Phytophthora
Phytophthora nicotianae
Pokeweed
Potato (Solanum tuberosum)
Pythium

Pythium aphanidermatum
Pythium ultimum
Rhizopus
Rhizopus stolonifer
Rice (Oryza sativa)
Samples
Seed
Silage
Size reduction
Stemphylium
Stemphylium botryosum
Stinging nettle
Test kits
Textiles
Tomato
Vegetable
Vibrio
Washing
Wood
Yeast
Zygomycota
pH
(detection and removal of **microorganism** contamination)

IT Agglutinins and Lectins
Antibodies
Avidins
Enzymes, uses
Metals, uses
Vicilin
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(detection and removal of **microorganism** contamination)

IT Wheat
(germ; detection and removal of **microorganism** contamination)

IT Proteins, specific or class
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(heveins; detection and removal of **microorganism** contamination)

IT Albumins, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(serum; detection and removal of **microorganism** contamination)

IT Fibers
RL: NUU (Other use, unclassified); USES (Uses)
(spinning; detection and removal of **microorganism** contamination)

IT Centrifuges
(tubes; detection and removal of **microorganism** contamination)

IT 1398-61-4, Chitin
RL: ANT (Analyte); ANST (Analytical study)
(chitin-binding lectin chitovibrin, detection and removal of **microorganism** contamination)

IT 7512-17-6, N-Acetyl-D-glucosamine
RL: ANT (Analyte); ANST (Analytical study)
(detection and removal of **microorganism** contamination)

IT 58-85-5, Biotin 9013-20-1, Streptavidin 9025-56-3, Hemicellulase 9025-98-3, Pectinesterase 9032-75-1, Pectinase 9033-35-6, Pectin lyase 37332-03-9, Fluorochrome
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(detection and removal of **microorganism**

contamination)

L154 ANSWER 14 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:566663 HCAPLUS Full-text
DOCUMENT NUMBER: 135:163319
TITLE: Peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya
INVENTOR(S): Hyldig-Nielsen, Jens J.; O'Keefe, Heather P.
PATENT ASSIGNEE(S): Boston Probes Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 30 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001010910	A1	20010802	US 1999-368089 <--	19990803
US 6280946	B2	20010828		
US 6656687	B1	20031202	US 2001-822763 <--	20010330
US 7108980	B1	20060919	US 2003-684971 <--	20031014

PRIORITY APPLN. INFO.:			
US 1998-95628P	P	19980807	<--
US 1999-368089	A1	19990803	<--
US 2001-822763	A3	20010330	<--

ED Entered STN: 06 Aug 2001
AB This invention is directed to peptide nucleic acid (PNA) probes, probe sets, methods and kits useful for the universal detection, identification and/or enumeration of **bacteria** and/or eucarya in a sample. The PNA probes targeted to rRNA sequence, labeled with chromophores, fluorophores, spin labels, radioisotopes, enzymes, haptens, and chemiluminescent compds., and may be immobilized on a support, are suitable for in situ hybridization. Unique PNA probe constructs of this invention also include probes comprising two or more different types of labels such as the use of a hapten/fluorophore (e.g. fluorescein) in combination with an enzyme (e.g. soybean peroxidase). Detection, identification and or quantitation is made possible by correlating the hybridization, under suitable hybridization conditions, of the probing nucleobase sequence of a PNA probe to the target sequence of **bacteria** or eucarya in the sample to thereby determine the presence, absence or number of **bacteria** and/or eucarya in the sample. This correlation is made possible by direct or indirect detection of the probe/target sequence hybrid. This invention is also directed to a multiplex PNA in-situ hybridization (PNA-ISH) assay and particularly a PNA-FISH assay. The PNA probes, probe sets, methods and kits of this invention are particularly useful for the detection, identification and/or enumeration of **bacteria** and eucarya (e.g. pathogens) in food, beverages, water, pharmaceutical products, personal care products, dairy products or environmental samples.
IC ICM C12Q001-68
INCL 435006000

CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 10, **17**
ST PNA probe rRNA sequence **bacteria** eucarya detection; fluorescence in situ hybridization PNA probe **bacteria** eucarya detection
IT rRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(23 S; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT Onium compounds
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(acridinium, esters, detectable label; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT Chemiluminescent substances
Chromophores
Fluorescent indicators
Spin labels
(detectable label; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT Enzymes, uses
Haptens
Radionuclides, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(detectable label; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT **Beverages**
Dairy products
Drugs
Food analysis
Health products
(detection of **bacteria** and eucarya in; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT Nucleic acid hybridization
(in situ, fluorescence; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT Nucleic acid hybridization
(in situ; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)
IT Bacillus subtilis
Bacteria (Eubacteria)
Brettanomyces
Dekkera intermedia
Dot blot hybridization
Environmental analysis
Escherichia coli
Eukaryote (Eukaryotae)
Immobilization, biochemical
Lactobacillus
Pediococcus damnosus
Pseudomonas aeruginosa
Pseudomonas fluorescens
Pseudomonas putida
Saccharomyces cerevisiae
Salmonella typhimurium
Staphylococcus aureus
Staphylococcus epidermidis
Test kits
Zygosaccharomyces bailii
Zygosaccharomyces rouxii
(peptide nucleic acid probes targeted to rRNA sequence for

universal detection of **bacteria** and eucarya)

IT Peptide nucleic acids
Probes (nucleic acid)
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 194785-18-7D, NHS esters
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(6-Carboxy-X-rhodamine, PNA labeling with; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 72088-94-9D, 5(6)Carboxyfluorescein, NHS esters 216699-35-3D, NHS esters
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(PNA labeling with; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 114949-58-5 128906-62-7 143349-36-4 173589-05-4 314015-14-0 353342-14-0 353342-15-1 353342-16-2
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(PNA nucleotide sequence; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 9004-54-0D, Dextran, conjugate, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(detectable label; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 7732-18-5, Water, analysis
RL: AMX (Analytical matrix); ANST (Analytical study)
(detection of **bacteria** and eucarya in; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 111-95-5 619-45-4, 4-Aminobenzoic acid methyl ester 4480-83-5, Diglycolic anhydride 105047-45-8 172405-45-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 244608-14-8P, Bis(2-methoxyethyl)amidyldiglycolic acid
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 66493-39-8P 215101-75-0P 352427-96-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

IT 9003-99-0D, Peroxidase, PNA conjugates
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(soybean; peptide nucleic acid probes targeted to rRNA sequence for universal detection of **bacteria** and eucarya)

L154 ANSWER 15 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:594541 HCAPLUS Full-text
DOCUMENT NUMBER: 135:166140
TITLE: Monitoring of oxidation changes of saccharides and reductones by color indicators
AUTHOR(S): Savel, Jan
CORPORATE SOURCE: Budejovicky Budvar, Ceske Budejovice, Czech

Rep.
SOURCE: Kvasny Prumysl (**2001**), 47(3), 69-73
CODEN: KVPRAB; ISSN: 0023-5830
PUBLISHER: Vyzkumny Ustav Pivovarsky a Sladarsky
DOCUMENT TYPE: Journal
LANGUAGE: Czech
ED Entered STN: 17 Aug 2001
AB The color changes of 10 indicators exposed to radical reaction initiators are described. Most indicators decay to colorless products, with some of them forming colored intermediates. Similar changes in these indicators were observed during heating in the presence of maltose. The thermal decomposition of maltose may generate reduction substances and initiate radical reactions. The thermal decomposition of some reducing substances may produce furfural, as seen with model solns. of ascorbic acid (with or without added Cu2+). The decomposition of linoleic acid in the presence of maltose was also evaluated. The course of these reactions may be monitored by the decoloration of the added methyl red indicator. Samples of malt, wort, and 10° and 12° beer were heated for 1-3 days at 80°C, volatile compds. were steam distilled, and the distillate was analyzed by UV-VIS spectroscopy. The absorption spectra were recorded in the range of 200-320 nm for volatile products formed during hop wort brewing and beer aging before and after reduction by **yeast** enzymes. These anal. techniques may be used for monitoring the processes of hop wort brewing and beer aging.
CC 17-1 (**Food** and Feed Chemistry)
IT **Beer**
Beer analysis
Colorimetric indicators
Malt
Volatile substances
Worts
(saccharides and reductones radical oxidation changes monitoring by color indicators in beer production)

L154 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:900838 HCAPLUS Full-text
DOCUMENT NUMBER: 134:39159
TITLE: Selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**
INVENTOR(S): Holroyd, Andrew; Mellors, Dawn; Hyde, William; Finch, Jane Ann
PATENT ASSIGNEE(S): International Diagnostics Group PLC, UK
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077242	A2	20001221	WO 2000-GB2156	2000 0614
			<--	
WO 2000077242	A3	20010503		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 1999-13856 A

1999
0615

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ED Entered STN: 22 Dec 2000

AB The present invention relates to a **medium** for the detection of Salmonella, Shigella and Escherichia coli O157 species, the selective **media** comprising a growth nutrient base incorporating growth substrates for E. coli O157 and Shigella, sugar fermentable by E. coli species other than E. coli O157, bile salts, citrate, magnesium ions and calcium ions in amts. such that the **media** allows growth of E. coli O157, Shigella and Salmonella while inhibiting growth of other **bacteria**; an H2S substrate for detecting hydrogen sulfide production; a chromogenic substrate for detecting β-galactosidase activity; and an indicator substrate for detecting fermentation of the sugar of (ii) and the use of the **medium** to detect Salmonella, Shigella and E. coli O157 species in clin. or **food** or water samples.

IC ICM C12Q001-00

CC 9-5 (Biochemical Methods)
Section cross-reference(s): 10, 14, **17**, 61

ST selective indicator **medium** Salmonella Shigella Escherichia O157

IT Escherichia coli
Escherichia hermannii
(O157; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Abscess
(anal. of sample from; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Amniotic fluid
Feces
Waters
(anal. of; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Peptones
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(as nitrogen source; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Analysis
(clin.; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT **Yeast**
(extract; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT **pH**
(indicators for sugar fermentation; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Bile
(ox; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Blood analysis
Citrobacter freundii
Color formers
Enterobacter aerogenes
Fermentation
Food analysis
Indicators
Klebsiella pneumoniae
Microorganism
Nutrients

Proteus (**bacterium**)
Pseudomonas aeruginosa
Salmonella
Salmonella albany
Salmonella allandale
Salmonella anatum
Salmonella assinie
Salmonella california
Salmonella choleraesuis arizonae
Salmonella coeln
Salmonella derby
Salmonella enteritidis
Salmonella gaminara
Salmonella heidelberg
Salmonella indiana
Salmonella karamoja
Salmonella kingston
Salmonella kubacha
Salmonella ndolo
Salmonella panama
Salmonella rutgers
Salmonella senftenberg
Salmonella typhimurium
Salmonella virchow
Serratia marcescens
Shigella
Shigella boydii
Shigella dysenteriae
Shigella flexneri
Shigella sonnei
Urine analysis
Yersinia enterocolitica
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Bile salts
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT **Culture media**
(selective; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT Galactosides
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(β-galactosides; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 50-70-4, Sorbitol, biological studies 58-86-6, D-Xylose, biological studies 59-23-4, Galactose, biological studies 69-65-8, Mannitol 69-79-4, Maltose 87-89-8, Inositol 99-20-7, Trehalose 138-52-3, Salicin 367-93-1, IPTG 488-81-3, Adonitol 585-99-9, Melibiose 608-66-2, Dulcitol 3458-28-4, D-Mannose 3615-41-6, Rhamnose 5328-37-0, L-Arabinose
RL: BUU (Biological use, unclassified); BIOL (Biological study);

USES (Uses)
(as carbon source; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 20074-52-6D, compds., uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(chromogenic indicators of hydrogen sulfide; selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 9031-11-2, β-Galactosidase
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 7783-06-4, Hydrogen sulfide, analysis
RL: ANT (Analyte); FMU (Formation, unclassified); ANST (Analytical study); FORM (Formation, nonpreparative)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 369-07-3, o-Nitrophenol-β-D-galactopyranoside 553-24-2, Neutral Red 6160-78-7, 4-Methylumbelliferyl-β-D-galactopyranoside 7240-90-6, 5-Bromo-4-chloro-3-indolyl-β-D-galactopyranoside 126787-65-3
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 63-91-2, Phenylalanine, biological studies 77-92-9, biological studies 302-95-4, Sodium desoxycholate 994-36-5, Sodium citrate 1185-57-5, Ferric ammonium citrate 3522-50-7, Ferric citrate 7487-88-9, Magnesium sulfate, biological studies 10043-52-4, Calcium chloride, biological studies 14127-61-8, Calcium ion, biological studies 22537-22-0, Magnesium ion, biological studies
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

IT 56-87-1, Lysine, biological studies 497-19-8, Sodium carbonate, biological studies 7772-98-7, Sodium thiosulfate 9002-18-0, Agar
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(selective indicator **media** for detection of Salmonella and Shigella and Escherichia coli O157 **microorganisms**)

L154 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:861840 HCAPLUS Full-text
DOCUMENT NUMBER: 134:14921
TITLE: Culture medium for detection of Dekkera and Brettanomyces
INVENTOR(S): Loureiro, Virgilio Borges; Goncalves, Maria da Graca Alves; Rodrigues, Nuno Miguel Sousa Falcao Freire
PATENT ASSIGNEE(S): Instituto Superior de Agronomia, Port.; Stab-Tratamento de Aguas e Biotecnologia, Lda.
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000073495	A1	20001207	WO 2000-PT5	2000 0531
			<--	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PT 102306	A	20001130	PT 1999-102306	1999 0531
			<--	
PT 102306	B	20020130		
CA 2377144	A1	20001207	CA 2000-2377144	2000 0531
			<--	
BR 2000011117	A	20020226	BR 2000-11117	2000 0531
			<--	
EP 1185686	A1	20020313	EP 2000-935749	2000 0531
			<--	
EP 1185686	B1	20050817		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003501048	T	20030114	JP 2001-500805	2000 0531
			<--	
NZ 515656	A	20040227	NZ 2000-515656	2000 0531
			<--	
AU 777883	B2	20041104	AU 2000-51164	2000 0531
			<--	
AT 302284	T	20050915	AT 2000-935749	2000 0531
			<--	
ZA 2001009750	A	20030227	ZA 2001-9750	2001 1127
			<--	
IN 2001CN01811	A	20050520	IN 2001-CN1811	2001 1224
			<--	

PRIORITY APPLN. INFO.: PT 1999-102306 A

1999
0531
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WO 2000-PT5 W
2000
0531
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ED Entered STN: 08 Dec 2000
AB The present invention provides a generic culture medium for the detection and enumeration of **yeasts** belonging to the Dekkera and Brettanomyces genera and a method for the detection and enumeration of said **yeasts** using said culture medium. According to the invention, the method comprises adding to a base **yeast** culture medium, a non fermentable energy source, particularly ethanol, p-cumaric acid as an aromatic compound promoting substrate, exclusively produced by said **yeast** genera, an acid-base indicator, particularly bromocresol green, a **yeast** growth inhibitor antibiotic, particularly cycloheximide, and a **bacterial** growth inhibiting antibiotic, particularly chloramphenicol and/or oxytetracycline. When **yeasts** of the genera Dekkera and Brettanomyces are cultivated in said medium, the developed colonies show a characteristic color, the culture medium color changes according a reproducible pattern, due to the decrease in pH, and a characteristic phenol-like aroma is developed, easily detectable by smell after a few days of incubation, which allows their detection and enumeration. The invention is useful in the detection and enumeration of **yeasts** belonging to the Dekkera and Brettanomyces genera in the food and beverage industry, allowing its inclusion in **yeast** identification galleries.
IC ICM C12Q001-04
CC 9-2 (Biochemical Methods)
Section cross-reference(s): 10, **17**
IT **Bacteria** (**Eubacteria**)
Filamentous fungi
Yeast
(Dekkera and Brettanomyces detection in presence of; culture medium for detection of Dekkera and Brettanomyces)
IT **Acid-base indicators**
Beverages
Brettanomyces
Dekkera
Food
Food analysis
Wine analysis
(culture medium for detection of Dekkera and Brettanomyces)
IT Antibiotics
(**yeast** and **bacteria** growth inhibiting; culture medium for detection of Dekkera and Brettanomyces)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:861839 HCAPLUS Full-text
DOCUMENT NUMBER: 134:14931
TITLE: Culture medium containing glucose and formic acid and acid-base indicator for the detection of Zygosaccharomyces bailii and Z. bisporus
INVENTOR(S): Leao, Cecilia; Corte-Real, Manuela; Schuller, Dorit
PATENT ASSIGNEE(S): Universidade do Minho, Port.; Stab-Tratamento de Aguas e Biotecnologia, Lda.
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000073494 A1 20001207 WO 2000-PT4
2000
0531
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PT 102305 A 20001130 PT 1999-102305
1999
0531
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PT 102305 B 20020130

CA 2375111 A1 20001207 CA 2000-2375111
2000
0531
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BR 2000011107 A 20020305 BR 2000-11107
2000
0531
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EP 1185685 A1 20020313 EP 2000-935748
2000
0531
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2003501047 T 20030114 JP 2001-500804
2000
0531
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NZ 515657 A 20040130 NZ 2000-515657
2000
0531
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ZA 2001009748 A 20030227 ZA 2001-9748
2001
1127
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PRIORITY APPLN. INFO.: PT 1999-102305 A
1999
0531
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WO 2000-PT4 W
2000
0531
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ED Entered STN: 08 Dec 2000

AB The present invention refers to a differential and selective culture medium, for the detection of **yeasts** of the species Zygosaccharomyces bailii and Zygosaccharomyces bisporus, allowing a drastic reduction in the time and work usually involved in the conventional detection of these species. According to the present invention, the detection of Zygosaccharomyces bailii and Zygosaccharomyces bisporus is accomplished with one single test that only requires the preparation, and inoculation of one liquid or solid culture medium. This culture medium is comprised by a base mineral medium supplemented with oligoelements and vitamins, by glucose and formic acid as the only energy and carbon sources, and by an acid-base indicator. The acid-base indicator, particularly bromocresol green, provides the medium with a green coloring that is converted into blue through the action of the above mentioned **yeasts**. Addnl., the blue color presented by the colonies is a specific characteristic of these species and can

be observed in the medium after 48 to 96 h of incubation, depending upon the inoculation methodol. used. The invention can be used either with previously isolated and purified **yeast** strains or with cell suspensions of mixed **yeast** populations containing other **yeasts** different from Zygosaccharomyces bailii and Zygosaccharomyces bisporus, for the detection of these species in the food industry, namely in wines and other beverages. The medium can also be included in galleries of **yeast** identification tests.

IC ICM C12Q001-04
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 10, **17**
IT **Acid-base indicators**
Antibiotics
Beverages
Food
Food analysis
Food industry
Wine analysis
Zygosaccharomyces bailii
Zygosaccharomyces bisporus
Zygosaccharomyces rouxii
(culture medium containing glucose and formic acid and acid-base indicator for detection of Zygosaccharomyces bailii and Z. bisporus)
IT **Bacteria** (**Eubacteria**)
Yeast
(in presence of; culture medium containing glucose and formic acid and acid-base indicator for detection of Zygosaccharomyces bailii and Z. bisporus)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:215713 HCAPLUS Full-text
DOCUMENT NUMBER: 132:250352
TITLE: A rapid method for detecting coliform **bacteria** in **food** using β-galactosidase as an index
INVENTOR(S): Yamada, Shoichi; Ohashi, Eiji
PATENT ASSIGNEE(S): Nippon Suisan Kaisha, Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000093195	A	20000404	JP 1998-270370	1998 0924
			<--	
PRIORITY APPLN. INFO.:			JP 1998-270370	1998 0924
			<--	

ED Entered STN: 04 Apr 2000
AB A rapid and accurate method is described for detecting the presence of coliform **bacteria** in a **food** material or measuring their number according to the necessity using β-galactosidase as an index. The β-galactosidase activity is measured upon **culturing** a test sample or a test liquid containing a fixed amount of the test sample so as to increase the production amount of β-galactosidase, an enzyme specific to coliform **bacteria**. In order to increase the production amount of β-galactosidase, adenosine 3',5'-cyclic phosphate(c-AMP) and/or hexokinase for removing glucose and/or isopropyl-

β-D- thiogalactopyranoside (IPTG) are added to a **culture medium**. Preferably, a sensitive fluorescent substrate for β-galactosidase (preferably, 4-methylumbelliferyl-β-D- galactoside) is also added to the **medium**. Various coliform **bacteria** (e.g., Escherichia coli, Klebsiella pneumoniae) were accurately detected and measured by fluorometry using this method within 8 h.

IC ICM C12Q001-10
ICS C12Q001-34; C12Q001-48; C12Q001-10; C12R001-19; C12R001-22
CC 17-1 (**Food** and Feed Chemistry)
Section cross-reference(s): 10
ST coliform **bacteria** detection beta galactosidase fluorometry
IT Budvicia aquatica
Citrobacter amalonaticus
Citrobacter freundii
Citrobacter koseri
Coliform **bacteria**
Culture media
Enterobacter aerogenes
Enterobacter gergoviae
Enterobacter intermedius
Enterobacter sakazakii
Escherichia coli
Escherichia vulneris
Ewingella americana
Fluorescent substances
Fluorometry
Food analysis
Klebsiella ornithinolytica
Klebsiella oxytoca
Klebsiella pneumoniae
Klebsiella terrigena
Leclercia adecarboxylata
(rapid method for detecting coliform **bacteria** using β-galactosidase as index)
IT 9031-11-2, β-Galactosidase
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(rapid method for detecting coliform **bacteria** using β-galactosidase as index)
IT 6160-78-7, 4-Methylumbelliferyl-β-D-galactoside
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(rapid method for detecting coliform **bacteria** using β-galactosidase as index)
IT 60-92-4, c-AMP 367-93-1, IPTG 9001-51-8, Hexokinase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(rapid method for detecting coliform **bacteria** using β-galactosidase as index)

L154 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:710215 HCAPLUS Full-text
DOCUMENT NUMBER: 132:22251
TITLE: Application of enzyme-linked immunosorbent assay to quantitative evaluation of foam-active protein in wheat beer
AUTHOR(S): Kakui, Tatsufumi; Ishibashi, Yoshihiko; Kunishige, Yoko; Isoe, Akira; Nakatani, Kazuo
CORPORATE SOURCE: Research Institute for New Product Development, Suntory Ltd., Osaka, 618-8503, Japan
SOURCE: Journal of the American Society of Brewing

Chemists (**1999**), 57(4), 151-154
CODEN: JSBCD3; ISSN: 0361-0470
PUBLISHER: American Society of Brewing Chemists, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 07 Nov 1999
AB The development of a new method to determine foam-active protein in barley by ELISA was previously reported. There has been recent success in obtaining a polyclonal antibody to foam-active protein in wheat beer. By using two different antibodies, one for barley and one for wheat, the behavior of foam-active protein from wheat and barley was investigated during the brewing process and the following results were obtained: 1) the mol. weight of foam-active protein in wheat was smaller than that in barley and their isoelec. points were different; 2) the wheat and barley foam-active proteins showed different behavior during the brewing process, which reflected their different iso-elec. points; and 3) the **bubble size** of wheat beer was much smaller or finer than that of barley beer.
CC 17-1 (**Food** and Feed Chemistry)
IT Barley
Beer analysis
Brewing
Food foaming
Wheat
(application of ELISA to quant. evaluation of foam-active protein in wheat beer)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 21 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:402714 HCAPLUS Full-text
DOCUMENT NUMBER: 127:134860
TITLE: Experiments on the enzymic online determination of diacetyl and 2-acetolactate in beer
AUTHOR(S): Ogbomo, I.; Becker, T.; Hummel, W.; Danzer, J.; Schmidt, H. L.
CORPORATE SOURCE: Technische Universitat Munchen, Freising, Germany
SOURCE: Monatsschrift fuer Brauwissenschaft (**1997**), 50(5/6), 108-113
CODEN: MOBRDJ; ISSN: 0723-1520
PUBLISHER: Carl
DOCUMENT TYPE: Journal
LANGUAGE: German
ED Entered STN: 28 Jun 1997
AB To an automated and continuous control of beer ripening a flow injection anal. (FIA) system with immobilized enzymes was conceived and tested. As to the enzymic determination of free and total diacetyl using NADH fluorescence it turned out that none of the 3 available diacetyl reductases had a sufficient specificity, all of them reducing in addition 2,3-pentanedione and acetoine. The diacetones were presepd. from the latter compound by continuous pervaporation, and in the pervaporate satisfactory results of diacetyl determination were obtained, provided the concentration of acetoine in the primary analyte solution was below 8 ppm. The reaction time for the oxidative decarboxylation of 2-aceto-lactate to diacetyl was reduced from 60 min at 90° to 2 min at 25° , using Fe3+ as oxidant. This permitted to integrate a corresponding enzyme from enterobacter **aerogenes** catalyzed the conversion of the substrate, but also of its homolog 2-aceto-2-hydroxybutyrate. Nevertheless the determination of 2-acetolactate was possible in batch systems, however, in an online FIA system with immobilized enzyme the sensitivity of the enzyme (Km for acetolactatee = 0.45 mM) did not meet the demands needed for the problem in question. The potential of screening or genetic engineering for the provision of more selective and sensitive enzymes is discussed.
CC 17-1 (**Food** and Feed Chemistry)
IT **Beer**
Food analysis
(enzymic online determination of diacetyl and 2-acetolactate in beer)
IT 9075-02-9
RL: ARG (Analytical reagent use); ANST (Analytical study); USES

(Uses)
(from Enterobacter **aerogenes**; enzymic online determination of diacetyl and 2-acetolactate in beer)

L154 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:524342 HCAPLUS Full-text
DOCUMENT NUMBER: 125:216357
TITLE: Fluorescent assay for **bacterial** gram reaction
INVENTOR(S): Roth, Bruce L.; Millard, Paul J.; Yue, Stephen T.; Wells, K. Sam; Haugland, Richard P.
PATENT ASSIGNEE(S): Molecular Probes, Inc., USA
SOURCE: U.S., 32 pp., Cont.-in-part of U.S. 5,436,134.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5545535	A	19960813	US 1993-146328	1993 1101 <--
US 5436134	A	19950725	US 1993-90890	1993 0712 <--
US 5534416	A	19960709	US 1993-148847	1993 1108 <--
CA 2133765	A1	19941027	CA 1994-2133765	1994 0413 <--
CA 2133765	C	19991109		
EP 675924	A1	19951011	EP 1994-914173	1994 0413 <--
EP 675924	B1	20011212		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
AT 210703	T	20011215	AT 1994-914173	1994 0413 <--
ES 2166777	T3	20020501	ES 1994-914173	1994 0413 <--
JP 07196930	A	19950801	JP 1994-159824	1994 0712 <--
JP 2005272479	A	20051006	JP 2005-167583	2005 0607 <--
JP 2005344121	A	20051215	JP 2005-167584	2005 0607 <--
JP 2006111884	A	20060427	JP 2005-306416	2005

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PRIORITY APPLN. INFO.:	US 1993-47683	B2	
			1993
			0413
		<--	
	US 1993-90890	A2	
			1993
			0712
		<--	
	US 1993-146328	A2	
			1993
			1101
		<--	
	US 1993-148847	A	
			1993
			1108
		<--	
	WO 1994-US4127	W	
			1994
			0413
		<--	
	JP 1994-159824	A3	
			1994
			0712
		<--	

OTHER SOURCE(S): MARPAT 125:216357
ED Entered STN: 31 Aug 1996
AB The invention relates to a method of analyzing a sample thought to contain **bacteria** by using an aqueous solution comprising ≥1 fluorescent dyes of formulas I, II, III, and IV. Each of the dyes differ each from the other in their affinity for nucleic acids and in their spectral response to different types of **bacteria** in the sample. The first three dyes are nucleic acid stains and the fourth dye is a fluorescent reagent that binds selectively to cell surface components. The fluorescent dyes of formula I are highly membrane-permeant cyanine dye derivs. and label all **bacteria**, whether live or dead, whether gram-pos. or gram-neg. The dyes of formula II label only live gram-pos. **bacteria** and label all dead **bacteria** , whether gram-pos. or gram-neg. The dyes of formula II bind to nucleic acids preferentially with respect to the dyes of formula I. Fluorescent formula III dyes are membrane-impermeant dyes that give a fluorescent signal only in cells with compromised plasma membrane integrity, whether gram-neg. or gram-pos., and have a much higher binding affinity for nucleic acids than the fluorescent dyes of either formula I or formula II. Formula IV fluorescent dyes preferentially bind to an exterior component of a **bacterium**. The dyes are combined with a sample suspected of containing **bacteria** and illuminated at an appropriate wavelength to differentiate, according to the fluorescence response, live gram-neg., dead gram-neg., live gram-pos. and dead gram-pos. **bacteria** in the sample.
IC ICM C12Q001-04
ICS C12Q001-68; G01N033-00; C07H001-00
INCL 435034000
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 10, 14, **17**, 61
ST **bacteria** detection fluorescent dye gram reaction; cell viability detn **bacteria** fluorescent stain; **food** **bacteria** detection; water **bacteria** detection
IT Agglutinins and Lectins
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(AMCA conjugates; fluorescent assay for **bacterial** gram reaction)
IT Proteins, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(dye conjugates; fluorescent assay for **bacterial** gram reaction)
IT Bacillus cereus
Bacillus subtilis

Bacteria
Blood analysis
Body fluid
Cell wall
Clostridium sporogenes
Corynebacterium xerosis
Cytophaga psychrophila
Dyes, cyanine
Enterobacter **aerogenes**
Escherichia coli
Flavobacterium meningosepticum
Food analysis
Klebsiella pneumoniae
Lactobacillus acidophilus
Meat
Micrococcus luteus
Milk analysis
Mycobacterium phlei
Neisseria subflava
Propionibacterium freudenreichii
Pseudomonas aeruginosa
Rhizobium leguminosarum trifolii
Salmonella oranienburg
Salmonella typhimurium
Shigella sonnei
Staphylococcus aureus
Streptococcus pyogenes
Vegetable
Vibrio parahaemolyticus
Wine analysis
(fluorescent assay for **bacterial** gram reaction)

IT Nucleic acids
RL: ANT (Analyte); ANST (Analytical study)
(fluorescent assay for **bacterial** gram reaction)

IT Agglutinins and Lectins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(fluorescent assay for **bacterial** gram reaction)

IT Microscopy
(fluorescence, fluorescent assay for **bacterial** gram reaction)

IT Dyes
Staining, biological
Stains, biological
(fluorescent, fluorescent assay for **bacterial** gram reaction)

IT **Bacteria**
(gram-neg., fluorescent assay for **bacterial** gram reaction)

IT **Bacteria**
(gram-pos., fluorescent assay for **bacterial** gram reaction)

IT 7732-18-5, Water, analysis
RL: AMX (Analytical matrix); ANST (Analytical study)
(fluorescent assay for **bacterial** gram reaction)

IT 7512-17-6, N-Acetylglucosamine
RL: ANT (Analyte); ANST (Analytical study)
(fluorescent assay for **bacterial** gram reaction)

IT 91-20-3, Naphthalene, uses 91-64-5, Coumarin 120-12-7, Anthracene, uses 129-00-0, Pyrene, uses 578-95-0, Acridone 167648-75-1, Hexidium
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(fluorescent assay for **bacterial** gram reaction)

IT 161057-69-8P
RL: ARG (Analytical reagent use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT

(Reactant or reagent); USES (Uses)
(fluorescent assay for **bacterial** gram reaction)

IT 106562-32-7DP, AMCA, agglutinin conjugates 143413-84-7P, TOTO-1 143413-85-8P, YOYO-1 157199-58-1P 157199-59-2P, TO-PRO-1 161057-73-4P 161057-79-0P 161057-80-3P 161057-91-6P 180389-00-8P 181362-68-5P 181362-69-6P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(fluorescent assay for **bacterial** gram reaction)

IT 67-68-5, DMSO, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(fluorescent assay for **bacterial** gram reaction)

IT 64-17-5, Ethanol, reactions 67-56-1, Methanol, reactions 74-88-4, Methyl iodide, reactions 80-48-8, Methyl p-toluenesulfonate 109-89-7, Diethylamine, reactions 121-44-8, Triethylamine, reactions 491-35-0, Lepidine 591-50-4, Iodobenzene 607-66-9, 2-Hydroxy-4-methylquinoline 615-22-5, 2-Methylthiobenzothiazole 627-31-6 1191-15-7, DIBAL 2382-96-9, 2-Mercaptobenzoxazole 55514-14-2, 3-Methyl-2-methylthiobenzothiazolium tosylate 161057-97-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluorescent assay for **bacterial** gram reaction)

IT 2540-30-9P 13673-62-6P, 2-Methylthiobenzoxazole 58992-59-9P 143413-87-0P 148824-00-4P 161058-00-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorescent assay for **bacterial** gram reaction)

IT 181362-67-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorescent assay for **bacterial** gram reaction)

L154 ANSWER 23 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:145631 HCAPLUS Full-text
DOCUMENT NUMBER: 128:229509
TITLE: ELISA for detection of salmonella in **foodstuffs**
AUTHOR(S): Hochel, I.; Malkova, K.; Demnerova, K.; Fukal, L.; Poplstein, M.; Skvor, J.; Rauch, P.
CORPORATE SOURCE: Department of Biochemistry and Microbiology, Institute of Chemical Technology, Prague, 101 03, Czech Rep.
SOURCE: Current Status and Future Trends in Analytical Food Chemistry, Proceedings of the European Conference on Food Chemistry, 8th, Vienna, Sept. 18-20, 1995 (**1995**), Volume 3, 711-714. Editor(s): Sontag, Gerhard; Pfannhauser, Werner. Austrian Chemical Society: Vienna, Austria.
CODEN: 65SOA5
DOCUMENT TYPE: Conference
LANGUAGE: English
ED Entered STN: 11 Mar 1998
AB Sandwich ELISA for detection/determination of Salmonella cells was developed. The detection limit 2.4x103 cells/mL was reached for model samples, using rabbit polyclonal antibodies and IgG-peroxidase conjugates. The cross reactivity was found neither with somatic antigens O: 1,2,12; O: 6,7 and O: 4,5,12, nor with by heat inactivated cells of Enterobacter **aerogenes**, Escherichia coli, Bacillus subtilis, Pseudomonas cepatia with antibody against somatic antigen O: 9,12. The developed ELISA was verified by standard addition of antigen to the different **food** matrix samples. The recovery varied from 82 - 102%.
CC 17-1 (**Food** and Feed Chemistry)
ST salmonella detn **food** ELISA
IT Egg white
Egg yolk
Food analysis
Mayonnaise
Milk

Puddings
Salmonella
Salmonella enteritidis
Salmonella typhimurium
(ELISA for detection of salmonella in **foodstuffs**)
IT Bakery products
(cakes; ELISA for detection of salmonella in **foodstuffs**)
IT Immunoassay
(enzyme-linked immunosorbent assay; ELISA for detection of salmonella in **foodstuffs**)
IT Bakery products
(frostings, chocolate; ELISA for detection of salmonella in **foodstuffs**)
IT Milk
(skim; ELISA for detection of salmonella in **foodstuffs**)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L154 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:864034 HCAPLUS Full-text
DOCUMENT NUMBER: 123:283849
TITLE: Disposable oxygen electrode system without membranes applied to the detection of ultrahigh-temperature milk spoilage
AUTHOR(S): Bell, C.; Ackland, M.R.; Fitzsimmonds, J.F.; Smith, V.M.; Neaves, P.
CORPORATE SOURCE: Microbiology Department, Technical Division Laboratories, Surrey, KT7 0ZY, UK
SOURCE: Netherlands Milk and Dairy Journal (**1995**), 49(2/3), 139-49
CODEN: NMDJAX; ISSN: 0028-209X
PUBLISHER: Association for the Advancement of Dairy Science
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 19 Oct 1995
AB A disposable oxygen electrode system designed and constructed without membranes was used alongside pH and **bacteriol**. counts to detect spoilage in ultrahigh-temperature (UHT) milks inoculated with low nos. of Pseudomonas fluorescens, Enterobacter **aerogenes**, Micrococcus luteus, Bacillus licheniformis or Lactobacillus plantarum. The electrode system detected **bacterial** growth in the absence of any pH change and the electrode data were available within seconds of sampling compared with 72 h for traditional **bacterial** counts.
CC 17-1 (**Food** and Feed Chemistry)
Section cross-reference(s): 10
IT Bacillus licheniformis
Enterobacter **aerogenes**
Food analysis
Lactobacillus plantarum
Micrococcus luteus
Milk analysis
Pseudomonas fluorescens
(oxygen electrode system without membranes applied to the detection of ultrahigh-temperature milk spoilage)

L154 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:577119 HCAPLUS Full-text
DOCUMENT NUMBER: 119:177119
TITLE: An apparatus for indicating the presence of **carbon dioxide**, and a method of measuring and indicating **bacterial** activity within a **container** or **bag**
INVENTOR(S): Holte, Bo

PATENT ASSIGNEE(S): Den.
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9315402	A1	19930805	WO 1993-DK40	1993 0204 <--
W: AT, AU, BR, CA, CH, DE, ES, GB, HU, JP, KR, LU, MG, MN, MW, NL, PL, RU, SD, SE, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9334927	A	19930901	AU 1993-34927	1993 0204 <--
PRIORITY APPLN. INFO.:			DK 1992-134 A	1992 0204 <--
			WO 1993-DK40 A	1993 0204 <--

ED Entered STN: 30 Oct 1993

AB The biol. activity within a **container** or **bag** containing a **foodstuff** or a human thrombocyte concentrate is monitored by means of an apparatus for indicating the partial pressure of **carbon dioxide**. The apparatus comprises a first foil of a light-transparent material substantially impermeable to gas and water, a second foil constituting a **carbon dioxide**-permeable membrane, and an indicator system contained within a sponge which is enclosed within a chamber defined between the 1st and 2nd foils, resp. As **carbon dioxide** permeates into the chamber, the indicator system generates a visible indication in response to exposure to **carbon dioxide**; the indication is visible through the 1st foil. Diagrams of the apparatus are included. A prototype apparatus using Bromethymol Blue indicator was tested in a blood bank and also used for transcutaneously measuring the partial pressure of **carbon dioxide** of a test person; the prototype responded correctly when exposed to **carbon dioxide**.

IC ICM G01N031-22

CC 9-1 (Biochemical Methods)
Section cross-reference(s): **17**, 63

ST **carbon dioxide** detection app **bacteria** **container**; **bag bacteria carbon** **dioxide** detection app; **foodstuff** **container carbon dioxide** detection app; thrombocyte **bag carbon dioxide** detection app; indicator app **carbon dioxide**

IT **Bacteria**
(activity of, inside material-containing or sample-containing **container** or **bag**, indicator apparatus for **carbon dioxide** detection for)

IT **Indicators**
(apparatus containing, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)

IT **Food analysis**
(**bacteriol.** activity detection in, in **bag** of **food**, indicator apparatus for **carbon dioxide** detection for)

IT **Bags**

Containers
(**bacteriol.** activity inside material-containing or sample-containing, indicator apparatus for **carbon dioxide** detection for)
IT Blood platelet
(**bag** of, **bacteriol.** activity detection in, indicator apparatus for **carbon dioxide** detection for)
IT Blood preservation
(**carbon dioxide**-measuring apparatus for storage **containers** in, **bacteriol.** activity detection in relation to)
IT Biological materials
(**container** or **bag** of, **bacteriol.** activity detection in, indicator apparatus for **carbon dioxide** detection for)
IT Polyamides, uses
RL: ANST (Analytical study)
(indicator apparatus containing layer of, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT Filter paper
(indicator apparatus containing sponge of, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT Buffer substances and systems
(indicator apparatus containing, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT Sponge
(indicator-containing, apparatus with, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT Analysis
(biochem., apparatus, indicator-containing., for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT Medical goods
(blood **bags**, **bacteriol.** activity detection in, indicator apparatus for **carbon dioxide** detection for)
IT Films
(foils, indicator apparatus containing, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT 144-55-8, Sodium bicarbonate, biological studies
RL: BIOL (Biological study)
(indicator apparatus containing buffer of, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT 9002-88-4, Polyethylene
RL: ANST (Analytical study)
(indicator apparatus containing layer of, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)
IT 9002-86-2, PVC
RL: ANST (Analytical study)
(indicator apparatus containing support foil of, for **carbon dioxide** detection in **container** or **bag**

of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)

IT 76-59-5
RL: ANST (Analytical study)
(indicator apparatus containing, for **carbon dioxide** detection in **container** or **bag** of **foodstuff** or thrombocytes or other biol. material, **bacteriol.** activity detection in relation to)

L154 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:490788 HCAPLUS Full-text
DOCUMENT NUMBER: 119:90788
TITLE: Method test **media** and chromogenic compounds for identifying and differentiating general coliforms and Escherichia (E.) coli **bacteria**
INVENTOR(S): Roth, Jonathan N.; Ferguson, Wilfred J.
PATENT ASSIGNEE(S): RCR Scientific, Inc., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5210022	A	19930511	US 1990-512188 <--	19900420
US 5358854	A	19941025	US 1993-71332 <--	19930603
US 6699685	B1	20040302	US 1995-394608 <--	19950227
PRIORITY APPLN. INFO.:			US 1990-512188 A3 <--	19900420
			US 1992-906751 B1 <--	19920630
			US 1993-24212 A3 <--	19930301

ED Entered STN: 04 Sep 1993
AB General coliforms have β-galactosidase but not β-glucuronidase activity, and E. coli has β-glucuronidase. Therefore, for differentiating general coliforms from E. coli., a chromogenic β-galactosidase substrate (e.g. an indigo blue color precipitate producer, 5-bromo-4-chloro-3-indolyl-β-D-galactopyranoside) and a chromogenic β-glucuronidase substrate (e.g. a mauve or magenta color precipitate producer, 6-chloroindolyl-β-D-glucuronide, 4,6-dichloroindolyl-β-D-glucuronide, 6,7-dichloroindolyl- β-D-glucuronide, or 4,6,7-trichloroindolyl-β-D- glucuronide) are used in the test **media**.,
IC ICM C12Q001-04
ICS C12Q001-02; C12Q001-00; G01N033-53
INCL 435034000
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 10, **17**, 61
ST coliform Escherichia coli differentiation; beta glucuronidase

Escherichia coli; galactosidase beta coliform; chromogenic substrate glucuronidase galactosidase; water **food** pollution test **medium**

IT Escherichia coli
(differentiation of coliforms and, test **medium** containing chromogenic β-galactosidase and β-glucuronidase substrate for)

IT **Food analysis**
Waters, natural
(identification and differentiation of coliforms and E. coli in, test **medium** containing chromogenic β-galactosidase and β-glucuronidase substrate for)

IT **Citrobacter** freundii
Enterobacter aerogenes
Enterobacter cloacae
Klebsiella pneumoniae
(identification of, test **medium** containing chromogenic β-galactosidase and β-glucuronidase substrate for)

IT **Bacteria**
(coliform, differentiation of E. coli and, test **medium** containing chromogenic β-galactosidase and β-glucuronidase substrate for)

IT Waters, natural
(river, identification and differentiation of coliforms and E. coli in, test **medium** containing chromogenic β-galactosidase and β-glucuronidase substrate for)

IT 7240-90-6 138182-21-5 149231-49-2D, salts 149231-50-5D, salts 149231-51-6D, salts
RL: ANST (Analytical study)
(chromogenic β-galactosidase substrate, for differentiating coliforms from E. coli, in water or **food**)

IT 18656-89-8 35804-66-1 138182-19-1 149231-46-9 149231-47-0 149231-48-1
RL: ANST (Analytical study)
(chromogenic β-glucuronidase substrate, for differentiating E. coli from coliforms, in water or **food**)

IT 7732-18-5, Water, biological studies
RL: BIOL (Biological study)
(differentiation of coliforms and E. coli in, test **medium** containing chromogenic β-galactosidase and β-glucuronidase substrate for)

IT 9001-45-0, β-Glucuronidase
RL: PROC (Process)
(of E. coli, determination of, for differentiating from coliforms in water or **food**)

IT 9031-11-2, β-Galactosidase
RL: PROC (Process)
(of coliforms, determination of, for differentiating from E. coli in water or **food**)

IT 89-77-0P, 4-Chloroanthranilic acid 5900-56-1P, N-Acetyl-4-chloroanthranilic acid 108761-33-7P 149231-52-7P, 4-Chloroanthranilic acid hydrochloride 149231-53-8P 149231-54-9P 149231-55-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of chromogenic β-galactosidase substrate, for differentiating coliforms from E. coli, in water or **food**)

IT 138182-20-4P 149231-56-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of chromogenic

β-glucuronidase substrate, for differentiating E. coli from coliforms, in water or **food**)

IT 95-79-4, 5-Chloro-2-methylaniline 108-24-7, Acetic anhydride 127-09-3, Anhydrous sodium acetate 3926-62-3, Sodium monochloroacetate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of chromogenic β-galactosidase substrate, for differentiating coliforms from E. coli, in water or **food**)

IT 108-91-8, Cyclohexylamine, reactions 6205-83-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of chromogenic β-glucuronidase substrate, for differentiating E. coli from coliforms, in water or **food**)

L154 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:20933 HCAPLUS Full-text
DOCUMENT NUMBER: 118:20933
TITLE: Anti-Enterobacteriaceae common antigen (anti-ECA) antibodies and their applications in specific detection and for the count of whole Enterobacteriaceae using an immunochemical method
INVENTOR(S): Van Hoegaerden, Michel; Levasseur, Stephane; Drocourt, Jean Louis
PATENT ASSIGNEE(S): Chemunex, Fr.
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9217603	A1	19921015	WO 1992-FR311	19920408 <--
W: AU, CA, JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
FR 2674866	A1	19921009	FR 1991-4243	19910408 <--
FR 2674866	B1	19950524		
AU 9216889	A	19921102	AU 1992-16889	19920408 <--
EP 579720	A1	19940126	EP 1992-909670	19920408 <--
R: DE, FR, GB, IT, NL				

PRIORITY APPLN. INFO.: FR 1991-4243 A 19910408 <--
WO 1992-FR311 A 19920408 <--

ED Entered STN: 24 Jan 1993

AB Monoclonal antibodies (MAbs) to ECA and capable of recognizing all whole Enterobacteriaceae are prepared and used to detect and count whole Enterobacteriaceae. Antigenic fragments of the ECA which bind specifically with these MAbs are also disclosed. The MAbs are prepared by the hybridoma method and selected 1st by ELISA using ≥2 living Enterobacteriaceae as antigen and ≥1 **bacteria** not belonging to the Enterobacteriaceae family and then 2nd by immunofluorescence assay. Mab Kun9/15A3 was prepared by the hybridoma method using ECA from Escherichia coli as immunogen in mice and hybridoma supernatants were screened by ELISA and immunofluorescence immunoassay against E. coli, Citrobacter freundii, Enterobacter agglomerans, Proteus hauserii, and Serratia marcescens, as Enterobacteriaceae members, and against Pseudomonas maltophilia, as a nonmember. Methods to detect Enterobacteriaceae in **food** products, e.g. Philadelphia cheese and catsup, are described.

IC ICM C12P021-08
ICS A61K039-02; G01N033-569; G01N033-577

CC 15-3 (Immunochemistry)
Section cross-reference(s): 9, 10, **17**

ST Enterobacteriaceae common antigen monoclonal antibody; immunoassay
Enterobacteriaceae monoclonal antibody; **food** analysis
Enterobacteriaceae monoclonal antibody

IT Aeromonas hydrophila
Budvicia aquatica
Buttiauxella agrestis
Citrobacter freundii
Edwardsiella hoshinae
Edwardsiella tarda
Enterobacter **aerogenes**
Enterobacter agglomerans
Enterobacter amnigenus
Enterobacter asburiae
Enterobacter cloacae
Enterobacter gergoviae
Enterobacter hafniae
Enterobacter intermedium
Enterobacter sakazakii
Erwinia herbicola
Escherichia coli
Escherichia fergusonii
Escherichia hermannii
Escherichia vulneris
Klebsiella oxytoca
Klebsiella planticola
Klebsiella pneumoniae
Klebsiella pneumoniae ozaenae
Klebsiella rhinoscleromatis
Klebsiella terrigena
Kluyvera ascorbata
Kluyvera cryocrescens
Leclercia adecarboxylata
Levinea amalonatica
Levinea malonatica
Obesumbacterium proteus
Pleisomonas shigelloides
Pragia fontium
Proteus mirabilis
Proteus morganii
Proteus vulgaris
Providencia alcalifaciens
Providencia rettgeri
Providencia stuartii
Rahnella aquatilis
Salmonella
Serratia ficaria
Serratia fonticola
Serratia liquefaciens
Serratia marcescens
Serratia odorifera

Serratia plymuthica
Serratia rubidaea
Shigella flexneri
Shigella sonnei
Yersinia aldovae
Yersinia enterocolitica
Yersinia frederiksenii
Yersinia intermedia
Yersinia pseudotuberculosis
Yersinia ruckeri
(detection and counting of, monoclonal antibodies to Enterobacteriaceae common antigen for)

IT **Food analysis**
(Enterobacteriaceae detection and counting in, monoclonal antibodies to Enterobacteriaceae common antigen for)

L154 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:21165 HCAPLUS Full-text
DOCUMENT NUMBER: 118:21165
TITLE: A reproducible measurement of carbon dioxide desorption from sparkling wines
AUTHOR(S): Bach, Hans Peter; Fay, Jean Paul; Baltes-Gotz, Bernhard
CORPORATE SOURCE: Landes-Lehr- und Vesuchsanst. Trier, Trier, D-5500, Germany
SOURCE: Wein-Wissenschaft (**1992**), 47(2), 46-52
CODEN: WEWIAW; ISSN: 0375-8818
DOCUMENT TYPE: Journal
LANGUAGE: German
ED Entered STN: 24 Jan 1993
AB The desorption of CO2 from sparkling wines was related to **bubble size**. A device consisting of a computer with MS-DOS 3.2 operating system, an electronic balance, and a printer was used with menu-driven software to evaluate the effects of temperature, effervescence point, and measurement repetitions on the results. A piece of zeolite was used to initiate **bubbles** , and had a major effect on reproducibility. The method was tested with red and white sparkling wines, Asti spumante, perlwine, and champagnes, and graphs of CO2 desorption in relation to residual sugar and CO2 contents are given.
CC 17-1 (**Food** and Feed Chemistry)
IT **Wine analysis**
(carbon dioxide release from, automated determination of)

L154 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:55124 HCAPLUS Full-text
DOCUMENT NUMBER: 116:55124
TITLE: Contaminant detection process
INVENTOR(S): Farr, Lester John; Atrache, Vincent Habib; Braid, Geoffrey Harold; Harrison, David Ernest Forester
PATENT ASSIGNEE(S): Biotech Australia Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9119003	A1	19911212	WO 1991-AU247	1991 0607
			<--	
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9179674	A	19911231	AU 1991-79674	

1991
0607
<--

EP 533772 A1 19930331 EP 1991-911125
1991
0607
<--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
PRIORITY APPLN. INFO.: AU 1990-566 A
1990
0608
<--
WO 1991-AU247 A
1991
0607
<--

ED Entered STN: 21 Feb 1992

AB Contaminants having metabolic activity (e.g. **bacteria**, **yeast**, fungi) are detected/determined in samples (e.g. pharmaceuticals, cosmetics, **food**, **beverage**, water) by contacting the sample with a receptacle carrying antibodies which specifically bind the contaminants and detecting the metabolic activity in the receptacle caused by the bound contaminants. The bound contaminant may be released and then detected by measuring the change in elec. resistance of an added electrolyte solution Dipsticks coated with sheep anti-Salmonella flagella antibodies were added to S. typhimurium-containing samples for 20 min at 22°. Bound Salmonella were determined by measurement in a Bactometer impedence/conductance detection system after growth in selective **media** (a modified lysine decarboxylase **media**) or by growth in M-broth (non-specific growth **medium**), release of bound **bacteria** by heat (100° for 10 min) or papain treatment, and particle count by a Coulter counter.

IC ICM C12Q001-04
ICS C12M001-34; G01N033-53

CC 9-10 (Biochemical Methods)
Section cross-reference(s): 10, **17**, 61, 62, 63

ST **microorganism** contamination detection; immobilized antibody contaminant detn; Salmonella detection immunocapture Bactometer counter; Coulter counter Salmonella detection immunocapture

IT Polarity
(agents reducing, **microorganism** release from immobilized antibody by, in **microorganism** detection)

IT Flagellins
Lipopolysaccharides
RL: ANST (Analytical study)
(antibodies to, **microorganism** capture by, for **microorganism** contamination detection)

IT Electrolytes, biological
(change in elec. resistance of, in **microorganism** contamination detection, immunocapture and)

IT **pH**
(change in, agents inducing, **microorganism** release from immobilized antibody by, in **microorganism** detection)

IT Electric resistance
Enzymes
RL: ANST (Analytical study)
(change in, in **microorganism** contamination detection, immunocapture in relation to)

IT **Bacteria**
Fungi
Listeria
Listeria monocytogenes
Microorganism
Salmonella
Salmonella typhimurium
Yeast
(detection of, immunocapture and automated systems in)

IT Antibodies

RL: ANST (Analytical study)
(immobilized, in **microorganism** capture and detection)
IT Immunoassay
(in **microorganism** detection)
IT **Gases**
(metabolite, change in, in **microorganism** contamination detection, immunocapture in relation to)
IT **Beverages**
Cosmetics
Dairy products
Food analysis
Pharmaceutical analysis
(**microorganism** contamination in, detection of, immunocapture in)
IT Counters
(Coulter, in **microorganism** detection/determination, immunocapture and)
IT Immunoassay
(apparatus, in **microorganism** detection)
IT Immunoassay
(apparatus, in **microorganism** detection/determination, immunocapture and)
IT **Temperature effects, biological**
(heat, **microorganism** release from immobilized antibody by, in **microorganism** detection)
IT Antigens
RL: ANST (Analytical study)
(surface, antibodies to, **microorganism** capture by, for **microorganism** contamination detection)
IT 7782-44-7, Oxygen, biological studies 12408-02-5, Hydrogen ion, biological studies
RL: BIOL (Biological study)
(change in, in **microorganism** contamination detection, immunocapture in relation to)
IT 9024-76-4, Lysine decarboxylase
RL: ANST (Analytical study)
(**media**, Salmonella detection/determination by immunocapture and growth on)
IT 7732-18-5, Water, analysis
RL: ANST (Analytical study)
(**microorganism** contamination in, detection of, immunocapture in)
IT 9001-73-4, Papain 9001-92-7, Protease 1310-58-3, Potassium hydroxide, biological studies
RL: ANST (Analytical study)
(**microorganism** release from immobilized antibody by, in **microorganism** detection)
IT 12408-02-5
RL: ANST (Analytical study)
(pH, change in, agents inducing, **microorganism** release from immobilized antibody by, in **microorganism** detection)

L154 ANSWER 30 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:181955 HCAPLUS Full-text
DOCUMENT NUMBER: 102:181955
TITLE: **Bacterial** detection by nucleic acid hybridization, labeled probes and its test kit
INVENTOR(S): Grosch, Josephine C.; Wilson, Gary A.
PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA
SOURCE: Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 133288	A2	19850220	EP 1984-108804 <--	1984 0725
R: CH, DE, FR, GB, IT, LI, NL, SE				
AU 8431388	A	19850207	AU 1984-31388 <--	1984 0801
ES 534865	A1	19850816	ES 1984-534865 <--	1984 0803
JP 60110299	A	19850615	JP 1984-164735 <--	1984 0806
PRIORITY APPLN. INFO.:			US 1983-520525 A <--	1983 0805

ED Entered STN: 02 Jun 1985

AB A rapid, accurate, and economical method and test kit are described for the detection of **bacteria** in mammalian body fluids or in **foods** by hybridization (preferably solid-phase) between the single-stranded nucleic acids released from the **bacteria** and a polynucleotide probe with a homologous base sequence of at least a portion of 1 of the strands of a tuf or fus **bacterial** (preferably Escherichia coli) gene, followed by detection of the hybrid, preferably by solid-phase hybridization with a labeled form of the probe. The method is especially applicable to the screening of urine samples for the presence of **bacteria** belonging to the families Enterobacteriaceae, Pseudomonadaceae, and Streptococcaceae. Thus, urinary tract **bacterial** isolates were lysed, the released DNA was denatured, and the lysed denatured samples were immobilized on nitrocellulose pretreated with a solution containing bovine serum albumin, Ficoll, PVP, SDS, salmon sperm DNA, and buffer, followed by addition of 32P-labeled denatured tuf gene fragment, incubation for 16 h at 70°, and counting in a scintillation counter.

IC ICM C12Q001-68

CC 9-10 (Biochemical Methods)
Section cross-reference(s): 10, 14, **17**

ST body fluid **bacteria** detection hybridization; **food bacteria** detection hybridization; urinary tract infection diagnosis hybridization; nucleic acid hybridization **bacteria** urine; DNA hybridization **bacteria** detection urine; mammal body fluid **bacteria** detection

IT Mammal
(**bacteria** detection in body fluids of, by nucleic acid hybridization)

IT **Food analysis**
(**bacteria** detection in, by nucleic acid hybridization)

IT Urine analysis
(**bacteria** detection in, of humans by nucleic acid hybridization)

IT Body fluid
(**bacteria** detection in, of mammals by nucleic acid hybridization)

IT Bacillaceae
Bacteria
Citrobacter freundii
Enterobacter **aerogenes**
Enterobacter cloacae
Enterobacter hafniae
Escherichia coli
Klebsiella oxytoca

Klebsiella ozaenae
Klebsiella pneumoniae
Micrococcaceae
Proteus mirabilis
Proteus morganii
Providencia stuartii
Pseudomonadaceae
Serratia rubidaea
Staphylococcus aureus
Streptococcaceae
(detection of, in mammalian body fluids or **food** by nucleic acid hybridization)

IT Deoxyribonucleic acids
RL: ANST (Analytical study)
(hybridization of, for **bacteria** detection in mammalian body fluids and **foods**)

IT Urinary tract
(disease, infection, diagnosis of, in humans by **bacteria** detection by hybridization)

IT Streptococcus
(intestinal, detection of, in mammalian body fluids or **food** by nucleic acid hybridization)

IT Gene and Genetic element, microbial
RL: ANST (Analytical study)
(fus, hybridization of single-stranded, to single-stranded **bacterial** DNA for **bacteria** detection in mammalian body fluids and **foods**)

IT Gene and Genetic element, microbial
RL: ANST (Analytical study)
(tuf, hybridization of single-stranded, to single-stranded **bacterial** DNA for **bacteria** detection in mammalian body fluids and **foods**)

L154 ANSWER 31 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:21072 HCAPLUS Full-text
DOCUMENT NUMBER: 90:21072
TITLE: Determination of **food** microbial contamination
INVENTOR(S): Hasegawa, Hideo; Tsuchida, Hiroshi
PATENT ASSIGNEE(S): Meiji Milk Products Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53097897	A	19780826	JP 1977-12126	19770208
			<--	
JP 60036269	B	19850819		

PRIORITY APPLN. INFO.: JP 1977-12126 A 19770208
<--

ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB Microbial contamination of **foods**, is identified by measuring free organic nitrogen oxide radicals I [X = CH2CH(OH)CH2, CH2CH(CO2H), CH2CH[OP(:O)(OH)2]CH2]. Thus, Aerobacter **aerogenes** was inoculated into a sterilized mixture of 90 mL skim milk and 10 mL of the free organic nitrogen oxide radical 3-carbamoyl-2,2,5,5-tetramethyl-3-pyrrolin-1-yloxy [4399-80-8] to a concentration of 100 cells/mL. After incubation at

.apprx.25° for 2 h, the ESR spectrum was determined The spectrum intensity decreased by 5% and the cell count was 1600/mL.
IC G01N033-02
CC 17-1 (**Foods**)
IT **Microorganism**
(determination of, in **food** by ESR)
IT Aerobacter **aerogenes**
(determination of, in milk by ESR)
IT **Food analysis**
(**microorganisms** determination in, by ESR)
IT **Milk analysis**
(Aerobacter **aerogenes** determination in, by ESR)
IT 4399-80-8
RL: BIOL (Biological study)
(in Aerobacter **aerogenes** determination in milk by ESR)

L154 ANSWER 32 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1956:91727 HCAPLUS Full-text
DOCUMENT NUMBER: 50:91727
ORIGINAL REFERENCE NO.: 50:17229i,17230a-c
TITLE: Antibiotic properties of the fermented milk **beverages**
AUTHOR(S): Skorodumova, A. M.
SOURCE: Voprosy Pitaniya (**1956**), 15(No. 2), 32-6
CODEN: VPITAR; ISSN: 0042-8833
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ED Entered STN: 22 Apr 2001
AB Data are given which indicate that the fermented cow-milk product, kumyss, contains certain antibiotics which inhibit the growth of the following **bacteria**: Serratia marcescens, Aerobacter **aerogenes**, Bacillus subtilis, B. mycoides, Escherichia coli, Micrococcus candicans, and also Mycobacterium album and M. perrugosum. The antibiotic substances are produced during milk fermentation by the growing lactic acid **bacteria**, and particularly by the **yeast** cells. This is a symbiotic effect since neither lactic acid **bacteria** nor **yeasts**, if grown alone, can produce much of the antibiotic substances. When grown together in the fermenting milk the highest titer of the antibiotics was found on the 3rd day of the fermentation. By proper selecting of the **cultures** of the **bacteria** and the **yeasts** the titer in the acidophilous-**yeast** milk as high as 1:40-1:80 was obtained. Children suffering from tuberculosis were in a better health condition after **drinking** for 2 months 2 glasses of the fermented milk/day than the children receiving the same amount of fresh milk. Similar clinical results have been obtained on adult tuberculous patients.
CC 12 (**Foods**)
IT **Yeasts**
(antibiotics from, formation in milk fermentation)
IT Milk preparations
(**cultured** or fermented, antibiotic properties of **beverages** from)
IT Antibiotic substances
(from **beverages** from fermented milk)
IT **Bacteria**
(lactic acid, antibiotic-substance formation by, in milk fermentation)

L154 ANSWER 33 OF 44 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1946:27825 HCAPLUS Full-text
DOCUMENT NUMBER: 40:27825
ORIGINAL REFERENCE NO.: 40:5469a-b
TITLE: A note on the **pH** tolerance of **Aerobacter aerogenes** and **Aerobacter** macerans as related to natural ecology and decomposition of acid-**food** products
AUTHOR(S): Vaughn, Reese H.; Stadtman, Thressa C.
CORPORATE SOURCE: Univ. of California, Berkeley
SOURCE: Journal of Bacteriology (**1946**), 51,

263
CODEN: JOBAAY; ISSN: 0021-9193
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ED Entered STN: 16 Dec 2001
AB A strain of A. **aerogenes** which decomposed K bitartrate at pH 3.9-4.2, and a strain of A. macerans which caused spoilage of fruit at pH 3.8-4.0 were found. These strains could be cultivated in **media** at the acid levels referred to above.
CC 11C (Biological Chemistry: Microbiology)
IT **Food**
(decomposition of, by Aerobacter, pH tolerance and)
IT Aerobacter **aerogenes**
Bacillus macerans
(pH tolerance of, and **food** decomposition by)
IT **Hydrogen-ion concentration**
(Aerobacter tolerance to)

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L154 ANSWER 34 OF 44 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2007) on STN DUPLICATE 2
ACCESSION NUMBER: 2001:25550 AGRICOLA Full-text
DOCUMENT NUMBER: IND22303312
TITLE: Quantification and variability analysis of **bacterial** cross-contamination rates in common **food** service tasks.
AUTHOR(S): Chen, Y.; Jackson, K.M.; Chea, F.P.; Schaffner, D.W.
AVAILABILITY: DNAL (44.8 J824)
SOURCE: Journal of food protection, **Jan 2001.** Vol. 64, No. 1. p. 72-80
Publisher: Des Moines, Iowa : International Association of Milk, Food and Environmental Sanitarians.
CODEN: JFPRDR; ISSN: 0362-028X
NOTE: Includes references
PUB. COUNTRY: Iowa; United States
DOCUMENT TYPE: Article
FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension
LANGUAGE: English
CC Q203 Food Contamination and Toxicology, Poultry Products; Q205 Food Contamination and Toxicology, Horticultural Crop Products; U600 Home Food and Meal Preparation
CT chicken meat; enterobacter **aerogenes**; **food** contamination; **food** handling; hands; household equipment; **indicator** species; kitchens; lettuces; microbial contamination; transfer; washing; water systems
ST cutting boards; kitchen faucet spigots

L154 ANSWER 35 OF 44 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2007) on STN DUPLICATE 3
ACCESSION NUMBER: 2000:31701 AGRICOLA Full-text
DOCUMENT NUMBER: IND22035280
TITLE: Verifying apple cider plant sanitation and hazard analysis critical control point programs: choice of **indicator bacteria** and testing methods.
AUTHOR(S): Lang, M.M.; Ingham, S.C.; Ingham, B.H.
CORPORATE SOURCE: University of Wisconsin-Madison, WI.
AVAILABILITY: DNAL (44.8 J824)
SOURCE: Journal of food protection, **Aug 1999.**

Vol. 62, No. 8. p. 887-893
Publisher: Des Moines, Iowa : International Association of Milk, Food and Environmental Sanitarians.
CODEN: JFPRDR; ISSN: 0362-028X
NOTE: Includes references
PUB. COUNTRY: Iowa; United States
DOCUMENT TYPE: Article
FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension
LANGUAGE: English

AB The objectives of this study were (i) to evaluate the survival of coliforms, Escherichia coli, and enterococci in refrigerated apple cider; (ii) to develop simple and inexpensive presumptive methods for detection of these **bacteria**; (iii) to perform a field survey to determine the prevalence of these **bacteria** on apples and in apple cider; and (iv) based on our results, to recommend the most useful of these three **indicator** groups for use in verifying apple cider processing plant sanitation and hazard analysis critical control point (HACCP) programs. Eight of 10 coliform strains (5 E. coli, 1 Enterobacter **aerogenes**, and 2 Klebsiella spp.) inoculated into preservative-free apple cider (pH 3.4, 13.3 degrees Brix) survived well at 4 degrees C for 6 days (less than or equal to 3.0 log(10) CFU/ml decrease). Of 21 enterococci strains (Enterococcus faecalis, E. faecium, and E. durans), only 2 E. durans and 3 E. faecium strains survived well. Simple broth-based colorimetric methods were developed that detected the presence of approximately 10 cells of coliforms or enterococci. In three field studies, samples of unwashed apples (drops and picked), washed apples, and freshly pressed cider were presumptively analyzed for total coliforms, E. coli, and enterococci using qualitative and/or quantitative methods. Drop apples were more likely than picked apples to be contaminated with E. coli (26.7% vs. 0%) and enterococci (20% vs. 0%). Washing had little effect on coliform populations and in one field study was associated with increased numbers. Total coliform populations in cider ranged from < 1 CFU/ml to > 738 most probable number/ml, depending on the enumeration method used and the sample origin. E. coli was not recovered from washed apples or cider, but enterococci were present on 13% of washed apple samples. The qualitative coliform method successfully detected these **bacteria** on apples and in cider. Based on its exclusively fecal origin, good survival in apple cider, and association with drop apples, we conclude that E. coli is the most useful organism for verifying apple cider sanitation and HACCP programs.

CC Q205 Food Contamination and Toxicology, Horticultural Crop Products
CT apples; cider; detection; enterobacter **aerogenes**; enterococcus; escherichia coli; **food** contamination; **food** inspection; **food** processing; **food** safety; **food** sanitation; health hazards; incidence; **indicators**; klebsiella; methodology; monitoring; quality controls; refrigeration; risk assessment; risk reduction; streptococcus faecalis; streptococcus faecium; surveys; survival; testing; windfalls
ST enterococcus durans
RN 68583-22-2 (E. COLI)

L154 ANSWER 36 OF 44 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2007) on STN DUPLICATE 4

ACCESSION NUMBER: 1999:30328 AGRICOLA Full-text
DOCUMENT NUMBER: IND21976409
TITLE: Development of a model for evaluation of microbial cross-contamination in the kitchen.
AUTHOR(S): Zhao, P.; Zhao, T.; Doyle, M.P.; Rubino, J.R.; Meng, J.
CORPORATE SOURCE: University of Georgia, Griffin, GA.
AVAILABILITY: DNAL (44.8 J824)
SOURCE: Journal of food protection, **Aug 1998**. Vol. 61, No. 8. p. 960-963
Publisher: Des Moines, Iowa : International Association of Milk, Food and Environmental Sanitarians.

CODEN: JFPRDR; ISSN: 0362-028X
NOTE: Includes references
PUB. COUNTRY: Iowa; United States
DOCUMENT TYPE: Article
FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension
LANGUAGE: English

AB **Foods** can become contaminated with pathogenic **microorganisms** from hands, the cutting board, and knives during preparation in the kitchen. A laboratory model was developed to determine occurrence of cross-contamination and efficacy of decontamination procedures in kitchen **food** -handling practices. Enterobacter **aerogenes** B199A, an **indicator bacterium** with attachment characteristics similar to that of Salmonella spp., was used. Chicken meat with skin inoculated with 10(6) CFU of E. **aerogenes** B199A/g was cut into small pieces on a sterile cutting board. The extent of cross-contamination occurring from meat to the cutting board and from the cutting board to **vegetables** (lettuce and cucumbers) subsequently cut on the board was determined. Swab samples from the cutting board, hand washings, and lettuce and cucumber samples revealed that approximately 10(5) CFU of E. **aerogenes**/cm(2) were transferred to the board and hands and approximately 10(3) to 10(4) CFU of E. **aerogenes**/g to the lettuce and cucumbers. The surfaces of the cutting board and hands were treated with antibacterial agents after cutting the meat, and counts of E. **aerogenes** on the cutting board and **vegetables** (lettuce and cucumbers) were determined. Results revealed that use of the disinfectant reduced the population of E. **aerogenes** to almost nondetectable levels on the cutting boards. The average counts after treatment were < 20 CFU/g of **vegetable** and ranged from < 20 to 200 CFU per cm(2) or g on the cutting board and subsequently on the **vegetables**. These results indicate that **bacteria** with attachment characteristics similar to Salmonella spp. can be readily transferred to cutting boards during **food** preparation and then cross-contaminate fresh **vegetables** if the boards are not cleaned. Application of a kitchen disinfectant can greatly reduce **bacterial** contamination on cutting boards.

CC Q200 Food Contamination and Toxicology
CT **food** handling; **food** hygiene; household equipment; kitchens; microbial contamination
ST cutting boards

L154 ANSWER 37 OF 44 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2007) on STN DUPLICATE 5
ACCESSION NUMBER: 94:62411 AGRICOLA Full-text
DOCUMENT NUMBER: IND20411753
TITLE: Assessment of the marker value of various components of the coli-**aerogenes** group of Enterobacteriaceae and of a selection of Enterococcus spp. for the official monitoring of **drinking** water supplies.
AUTHOR(S): Charriere, G.; Mossel, D.A.A.; Beaudeau, P.; Leclerc, H.
AVAILABILITY: DNAL (448.39 So12)
SOURCE: The Journal of applied bacteriology, **Apr 1994**. Vol. 76, No. 4. p. 336-344
Publisher: Oxford ; New York : Blackwell Scientific, 1954-
CODEN: JABAA4; ISSN: 0021-8847
NOTE: Includes references
PUB. COUNTRY: England; United Kingdom
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: English

AB The traditional **indicators** Escherichia coli (in practice currently, though ecologically inaccurately, represented by 'thermotolerant coliforms' at 44 degrees C) and Enterococcus spp. proved to be suitable for the diagnosis of heavy and frequent fecal pollution observed in potentially dangerous waters, especially those originating from karstic aquifers. On the other hand, natural and treated waters, slightly and inconsistently contaminated, occasionally showed a variable Gram-negative flora, difficult to classify by routine tests. In that case, complete identification of isolates may be necessary to ensure a valid decision on the potability of the supply.

At any rate some of the Enterobacteriaceae contained in the 'fecal coliform' group and many other 'coliforms', distinct from E. coli, lack sanitary significance although their presence at certain levels may indicate inadequate disinfection, hiatuses in the integrity of the distribution system or both.

CC Q200 Food Contamination and Toxicology

CT coliform **bacteria**; contamination; **drinking** water; enterobacteriaceae; enterococcus; **indicators**; monitoring

L154 ANSWER 38 OF 44 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 534216 FROSTI Full-text

TITLE: The capacity of Enterobacteriaceae species to produce biogenic amines in cheese.

AUTHOR: Marino M.; Maifreni M.; Moret S.; Rondinini G.

SOURCE: Letters in Applied Microbiology, **2000**, (August), 31 (2), 169-173 (16 ref.)
ISSN: 0266-8254

DOCUMENT TYPE: Journal

LANGUAGE: English

SUMMARY LANGUAGE: English

ED 20011115

AB Biogenic amines in **foods** are mainly produced by microbial decarboxylation of amino acids, and they have been implicated in **food** poisoning. Several **microorganisms** are capable of their production, and cheese is frequently associated with biogenic amine toxicity - particularly with histamine. A total of 104 Enterobacteriaceae (including Serratia liquefaciens, Escherichia coli, Hafnia alvei, Arizona spp, Ent. **aerogenes**, Citrobacter freundii, and Klebsiella oxytoca) was isolated from blue-veined cheese from four dairies. All strains decarboxylated at least two amino acids in Mollers broth and in a Niven medium, and the decarboxylase activity was strain-specific. Over 100 ppm of cadaverine were produced by all strains, while 96% of strains also produced putrescine; histamine and tyramine were produced in the lowest concentrations. Biogenic amines were separated using HPLC followed by UV detection. A positive correlation between cadaverine concentration and Enterobacteriaceae counts in cheese was observed, and it is proposed that this may have promoted the increase in decarboxylase content; high concentrations of cadaverine resulted from lysine decarboxylation. It is suggested that the cadaverine content of blue-veined cheese might be useful as a quality **indicator** of hygienic cheesemaking and/or storage.

SH CONTAMINATION

CT AMINES; BIOGENIC AMINES; BLUE CHEESE; CADAVERINE; CHEESE; CONTENT; DAIRY PRODUCTS; DECARBOXYLATION; ENTEROBACTERIACEAE; FORMATION; OCCURRENCE; QUALITY; TYPES

L154 ANSWER 39 OF 44 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 395926 FROSTI Full-text

TITLE: The microbiological monitoring of **foods**: the use of marker (index and **indicator**) organisms and marker biochemical activities.

AUTHOR: Mossel D.A.A.; Corry J.E.L.; Struijk C.B.; Baird R.M.

SOURCE: Essentials of the microbiology of foods: a textbook for advanced studies., Published by: Wiley, Chichester, **1995**, 287-309
(refs on pp 447-649)
Mossel D.A.A.
ISBN: 0-471-93036-9

DOCUMENT TYPE: Book Article

LANGUAGE: English

ED 20011115

AB The authors consider that marker organisms have a particular use in monitoring particular manufactured goods and **drinking** water (i.e. commodities that have both been processed for safety), but their application to raw **foods** requires both discretion and caution. Traditional marker organisms belong to the Enterobacteriaceae group, including Escherichia coli and coli-**aerogenes bacteria**. Consideration is given to the use of Enterobacteriaceae as the sole criterion for evaluating the microbiological safety of **foods**; parallel testing for Enterobacteriaceae and other enteric pathogens; use of E. coli, Enterococcus species, Streptococcus mitis and S. salivarius and spore-

forming bacilli as marker organisms; total **bacterial** counts; microscopic counts; enumeration of **yeasts** and moulds; tests for metabolic activities; and enzyme tests.
SH MICROBIOLOGY
CT APPLICATIONS; BACILLUS; **BACTERIA**; BASIC GUIDE; DETECTION; DETERMINATION; ENTEROBACTERIACEAE; ENTEROCOCCUS; ESCHERICHIA COLI; GROWTH; INCUBATION; **INDICATOR BACTERIA**; **INDICATOR MICROORGANISMS**; **INDICATORS**; MARKERS; MEDIA; MICROBIAL MEDIA; MICROBIOLOGICAL MEDIA; **MICROORGANISMS**; PREFERENCES; RECOMMENDATIONS; RECOMMENDED; STREPTOCOCCUS

L154 ANSWER 40 OF 44 FSTA COPYRIGHT 2007 IFIS on STN
ACCESSION NUMBER: 1996(08):H0142 FSTA Full-text
TITLE: Isolation and characterization of motile aeromonads from Chilean freshwaters and their potential use as water quality **indicators**.
AUTHOR: Miranda, C. D.; Castillo, G.
CORPORATE SOURCE: Dep. of Civil Eng., Univ. of Chile, Casilla 228-3, Santiago, Chile
SOURCE: Environmental Toxicology and Water Quality, (**1996**) 11 (2) 91-98, 41 ref.
ISSN: 1053-4725
DOCUMENT TYPE: Journal
LANGUAGE: English
UP 20020111
AB Motile aeromonad levels were determined in Chilean freshwaters of varying faecal pollution loads, collected over 1 yr. Correlations between aeromonad levels and heterotrophic and faecal **indicators** in each water source, predominant Aeromonas species and biotypes, and differences in aeromonad phenotypic traits between water sources were also examined. Of 172 Aeromonas strains isolated, 56 were from slightly polluted, 60 from moderately polluted, and 56 from heavily polluted water sources. Densities of motile aeromonads were highest in waters with high domestic discharges (averaging 7.8 x 10.sup.7 cfu 100 ml.sup.-.sup.1, vs. 3.9 x 10.sup.2-3.8 x 10.sup.5 cfu 100 ml.sup.-.sup.1 in slightly to moderately polluted waters). Aeromonads were common in freshwaters in Chile, especially in eutrophic systems, and should be recognized as one of the potential causes of waterborne gastroenteritis outbreaks. In polluted waters, **bacterial indicator** counts were more variable than in unpolluted waters. A. hydrophila predominated in all samples. Striking differences were found between isolates recovered from different water samples, heavily polluted waters containing mainly anaerogenic lactose fermenters, vs. **aerogenic** nonlactose fermenters in slightly contaminated waters. Gluconate oxidation and acetoin production characteristics varied between populations. Motile aeromonads are proposed as complementary water pollution **indicators**.
CC H (Alcoholic and Non-Alcoholic Beverages)
CT AEROMONAS; **BACTERIA**; CONTAMINATION; **DRINKING WATER**; **FOOD SAFETY**; **FOOD SAFETY BEVERAGES**

L154 ANSWER 41 OF 44 FSTA COPYRIGHT 2007 IFIS on STN
ACCESSION NUMBER: 1990(02):R0012 FSTA Full-text
TITLE: [Microbiological quality of dried and smoked fish from Lake Tanganika.]
AUTHOR: Sindayigaya, E.; Debevere, J. M.
CORPORATE SOURCE: Fac. des Sci. Agron., Univ. de Gand, 9000 Ghent, Belgium
SOURCE: Sciences des Aliments, (**1989**) 9 (3) 507-516, 17 ref.
ISSN: 0240-8813
DOCUMENT TYPE: Journal
LANGUAGE: French
SUMMARY LANGUAGE: English
UP 20020111
AB 88 samples of dried fish (Stolothrissa tanganicae) and 77 samples of smoked fish (Luciolates stappersii) were studied. Total volatile basic N concentration were determined, and the fish samples were examined for total aerobic mesophiles, Enterobacteriaceae, coliforms, Escherichia coli, Streptococcus faecalis, sulphite-reducing clostridia, Clostridium perfringens, Staphyloccocus aureus and salmonellae.

Tables of results are given. Aerobic mesophile counts were commonly high (some being >10.sup.9/g), indicating spoilage; this was confirmed by the high total volatile basic N concentration Enterobacteriaceae counts varied widely; the predominant spp. were Proteus mirabilis, Citrobacter freundii, E. coli, Hafnia alvei, Enterobacter **aerogenes** and Enterobacter agglomerans. 10% of samples were free from Enterobacteriaceae. Coliform counts also varied widely; 9% of samples were free from coliforms. Staphylococcus aureus was detected in 52% of samples. No sample contained salmonellae or Clostridium perfringens; counts of sulphite-reducing clostridia were low. Streptococcus faecalis and Escherichia coli were the best **indicators** of faecal contamination.

CC R (Fish and Marine Products)

CT **BACTERIA; DRIED FOODS;** FISH; **FOOD SAFETY;** MICROBIOLOGICAL TECHNIQUES; **SMOKED FOODS; BACTERIAL COUNTS;** DRIED FISH; FISH SPECIFIC

L154 ANSWER 42 OF 44 FSTA COPYRIGHT 2007 IFIS on STN

ACCESSION NUMBER: 1983(08):H1120 FSTA Full-text

TITLE: Characterization of **indicator bacteria** in municipal raw water, **drinking** water, and new main water samples.

AUTHOR: Clark, J. A.; Burger, C. A.; Sabatinos, L. E.

CORPORATE SOURCE: Lab. Services Branch, Min. of the Environment, PO Box 213, Rexdale, Ontario M9W 5L1, Canada

SOURCE: Canadian Journal of Microbiology, (**1982**) 28 (9) 1002-1013, 10 ref.

DOCUMENT TYPE: Journal

LANGUAGE: English

SUMMARY LANGUAGE: French

UP 20020111

AB Municipal water samples were analysed by membrane filter (MF) and presence-absence (P-A) tests for pollution **indicator bacteria**. In 4 yr, 11 514 **bacterial** cultures were isolated from either raw water, **drinking** water, or new main water samples submitted to 3 environmental laboratories. The **bacterial** spp. occurring most often in all types of water samples were Escherichia coli (11.6-39.7%), Enterobacter **aerogenes** (18.1-26.3%), Aeromonas hydrophila (8.8-17.0%), Klebsiella pneumoniae (7.7-10.3%), and Citrobacter freundii (5.9-22.7%). A lactose - lauryl tryptose - tryptone broth was examined as an alternative medium to modified MacConkey broth in the presumptive portion of the P-A test. The intensity of acid and gas production in presumptive positive P-A bottles was compared with the types and frequencies of **indicator bacteria** shown by confirmatory tests. The results of detecting **indicator bacteria** following the analysis of 53 130 samples over a 2-yr period were arranged by water source (well, lake, river, mixed) and water type (raw or **drinking**) to determine the influence of these parameters on the recovery of **indicator bacteria**. A further subdivision of the sample types into raw surface, raw ground, in-plant, plant discharge, reservoir, and distribution samples demonstrated the effect of water treatment practices.

CC H (Alcoholic and Non-Alcoholic Beverages)

CT **BACTERIA; DRINKING WATER;** WATER; **INDICATOR**

L154 ANSWER 43 OF 44 FSTA COPYRIGHT 2007 IFIS on STN

ACCESSION NUMBER: 1979(12):J2111 FSTA Full-text

TITLE: Differential survival of Salmonella typhi, Escherichia coli, and Enterobacter **aerogenes** on lettuce in the field.

AUTHOR: Ercolani, G. L.

CORPORATE SOURCE: Inst. of Plant Path., Univ. of Bari, Bari, Italy

SOURCE: Zentralblatt fuer Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, II, (**1979**) 134 (5) 402-411, 6 ref.

DOCUMENT TYPE: Journal

LANGUAGE: English

SUMMARY LANGUAGE: German

UP 20020111

AB Artificial contamination of young lettuce plants with S. typhi (ST), Escherichia coli (EC), and Enterobacter **aerogenes** (EA) in the field in winter and summer resulted in presence of the pathogen and increased density of the 2 **indicator bacteria** (IB) in harvested produce. Viable counts of the 3 **bacteria**/g fresh weight declined at a decreasing rate with increasing time after contamination. The overall pattern of variation of the ST/IB ratio was correlated more closely with changes in the ST/EA than in the ST/EC ratio values. When viable counts were expressed as a proportion of the contaminating dose at different times after contamination, however, a closer similarity existed between ST and EC than between ST and EA values throughout winter and through the early part of summer experiments.

CC J (Fruits, Vegetables and Nuts)

CT **BACTERIA**; ESCHERICHIA; LETTUCES; SALMONELLA; **VEGETABLES SPECIFIC**; **AEROGENES # FIELD**; COLI # FIELD; ENTEROBACTER; ENTEROBACTERIACEAE; TYPHI # FIELD

L154 ANSWER 44 OF 44 FSTA COPYRIGHT 2007 IFIS on STN

ACCESSION NUMBER: 1977(12):H1968 FSTA Full-text

TITLE: Microbiological quality assurance of water in relation to **food** hygiene.

AUTHOR: Massel, D. A. A.

CORPORATE SOURCE: Dep. of the Sci. of Food of Anim. Origin, Fac. of Vet. Med., Univ. of Utrecht, Netherlands

SOURCE: Archiv fuer Lebensmittelhygiene, (**1976**) 27 (6) 197-198, 16 ref.

DOCUMENT TYPE: Journal

LANGUAGE: English

SUMMARY LANGUAGE: German

UP 20020111

AB A simple technique is described for the **bacteriological** monitoring of fresh and stored, piped water to be used in the **food** industry. Instead of the coli-**aerogenes** group of **indicator bacteria** and use of membrane filtration, which produced unacceptably low reproducibility of counts, Clark's P-A (presence or Absence) technique [Canadian Journal of Microbiology (1969) 15, 771] was applied. It is based on overnight enrichment of 100 ml aliquots in MacConkey Purple (MCP) broth at 30°C, after prior resuscitation of sublethally damaged **bacteria** for 2 h at 20°C in tryptone soy broth. Most samples showed no growth in MCP. Those that showed turbidity or acidification were further examined by the following procedures: streaking onto MacConkey agar and incubating at 37°C to isolate Enterobacteriaceae, Aeromonas sp. and some non-fermentative gram-negative rods; plating onto the same medium but incubating at 44°C to isolate E. coli; plating onto King agar with nitrofurantoin added and incubating at 42°C to isolate Pseudomonas aeruginosa; and plating onto modified Colobert agar (azide aesculin Kanamycin agar) and incubating at 37°C to detect Lancefield group D streptococci. In addition, the numbers of colony-forming units of psychrotropic Gram negative rods predominating in stored water should be assessed on King's medium.

CC H (Alcoholic and Non-Alcoholic Beverages)

CT **BACTERIOLOGY**; MICROBIOLOGICAL QUALITY; QUALITY CONTROL; STORAGE; WATER; **BACTERIOLOGICAL QUALITY**; STORED

FULL SEARCH HISTORY

```
=> d his nofile

     (FILE 'HOME' ENTERED AT 13:09:33 ON 03 JUL 2007)

     FILE 'HCAPLUS' ENTERED AT 13:09:47 ON 03 JUL 2007
               E US20050003051/PN
L1           1 SEA ABB=ON  PLU=ON  US20050003051/PN
               D ALL
               D AU
               SEL AU
L2         102 SEA ABB=ON  PLU=ON  ("ISSHIKI,  KENJI"/AU OR "OGAWA,
               JUNZO"/AU)
               DEL SEL
               SEL PA
               D PA
               D L1 PA
               DEL SEL
               SEL L1 PA
L3         123 SEA ABB=ON  PLU=ON  ("NATIONAL FOOD RESEARCH INSTITUTE
               JAPAN"/PA OR "YUSHIN GIKEN CO LTD"/PA)
L4           2 SEA ABB=ON  PLU=ON  L2 AND L3
               D KWIC
               D 1-2 KWIC
               D SCAN

     FILE 'REGISTRY' ENTERED AT 13:18:24 ON 03 JUL 2007
               E  124-38-9/RN
L5           1 SEA ABB=ON  PLU=ON  124-38-9/RN
               D CN
L6           1 SEA ABB=ON  PLU=ON  1333-74-0/RN
               D CN

     FILE 'HCAPLUS' ENTERED AT 13:19:53 ON 03 JUL 2007
               D SCAN L4
               E INDICATORS/CT
               E E3+ALL
L7        8358 SEA ABB=ON  PLU=ON  "INDICATORS (FOR TITRATION)"+ALL/CT

L8      214855 SEA ABB=ON  PLU=ON  L5
L9      509621 SEA ABB=ON  PLU=ON  L8 OR CARBON DIOXIDE OR CO2
L10     328115 SEA ABB=ON  PLU=ON  L6
               D 1-2 KWIC
L11     328115 SEA ABB=ON  PLU=ON  L6
L12      27430 SEA ABB=ON  PLU=ON  L11 AND (HYDROGEN OR H2)(2A)GAS
               D SCAN L4

     FILE 'ZCAPLUS' ENTERED AT 13:23:35 ON 03 JUL 2007
               D QUE L2
L13            QUE ABB=ON  PLU=ON  ISSHIKI K?/AU
L14            QUE ABB=ON  PLU=ON  OGAWA J?/AU
L15            QUE ABB=ON  PLU=ON  L13 AND L14
L16            QUE ABB=ON  PLU=ON  (L13 OR L14)

     FILE 'HCAPLUS' ENTERED AT 13:24:48 ON 03 JUL 2007
               D L1 PA

     FILE 'ZCAPLUS' ENTERED AT 13:24:48 ON 03 JUL 2007

     FILE 'HCAPLUS' ENTERED AT 13:24:56 ON 03 JUL 2007
               DEL SEL
               SEL L1 PA

     FILE 'ZCAPLUS' ENTERED AT 13:25:21 ON 03 JUL 2007
               E NATIONAL FOOD/CO
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                E NATIONAL FOOD RESEARCH/CO
                E YUSHIN/PA
                E YUSHIN G/PA
L17             QUE ABB=ON  PLU=ON  YUSHIN GIKEN?/PA,CS,SO,CO

     FILE 'HCAPLUS' ENTERED AT 13:27:17 ON 03 JUL 2007
L18           2 SEA ABB=ON  PLU=ON  L13 AND L14
                D QUE L3
L19         887 SEA ABB=ON  PLU=ON  (L13 OR L14)
L20          76 SEA ABB=ON  PLU=ON  L19 AND (FOOD? OR FEED OR DRINK?)
L21           2 SEA ABB=ON  PLU=ON  L19 AND (L3 OR L17)
                D L20 1-3 AU
                D SCAN
                D SCAN L21
L22       24850 SEA ABB=ON  PLU=ON  INDICATORS+PFT,OLD,NT/CT
L23       79523 SEA ABB=ON  PLU=ON  BEVERAGES+PFT,OLD,NT/CT
                E AEROGEN/CT
L24       47461 SEA ABB=ON  PLU=ON  "FOOD ANALYSIS"+PFT,OLD,NT/CT
L25       67685 SEA ABB=ON  PLU=ON  FRUIT+PFT,OLD,NT/CT
L26       20063 SEA ABB=ON  PLU=ON  "FRUIT AND VEGETABLE JUICES"+PFT,OL
                D,NT/CT
L27       93690 SEA ABB=ON  PLU=ON  VEGETABLE+PFT,OLD,NT/CT
L28      220043 SEA ABB=ON  PLU=ON  L23 OR L25 OR L26 OR L27
L29             QUE ABB=ON  PLU=ON  AEROGEN?
L30          72 SEA ABB=ON  PLU=ON  L28 AND L29
                D 1-2 KWIC
L31             QUE ABB=ON  PLU=ON  FOOD? OR FEED? OR DRINK? OR BEV?
L32         314 SEA ABB=ON  PLU=ON  L29 AND L31
L33           0 SEA ABB=ON  PLU=ON  L30 AND L22
L34           3 SEA ABB=ON  PLU=ON  L32 AND L22
                D 1-3 KWIC

     FILE 'STNGUIDE' ENTERED AT 13:40:11 ON 03 JUL 2007

     FILE 'HCAPLUS' ENTERED AT 13:42:46 ON 03 JUL 2007
L35     1485069 SEA ABB=ON  PLU=ON  CULTUR? OR MEDIUM
L36         360 SEA ABB=ON  PLU=ON  L30 OR L32
L37         124 SEA ABB=ON  PLU=ON  L36 AND L35
                D 100-103 KWIC
                D QUE
                D QUE
L38             QUE ABB=ON  PLU=ON  MICROORG?
L39          29 SEA ABB=ON  PLU=ON  L37 AND L38
                D 1-5 KWIC
L40           3 SEA ABB=ON  PLU=ON  L39 AND L22
                D 1-3 KWIC
                D SCAN L18
L41           4 SEA ABB=ON  PLU=ON  L39 AND L24
                D 1-4 KWIC
L42             QUE ABB=ON  PLU=ON  ?BACTER?
L43         120 SEA ABB=ON  PLU=ON  L37 AND L42
                D QUE
L44           9 SEA ABB=ON  PLU=ON  L43 AND (L22 OR L24)
                D 1-9 KWIC
L45             QUE ABB=ON  PLU=ON  YEAST+PFT,OLD,NT/CT
L46           9 SEA ABB=ON  PLU=ON  L37 AND L45
                D QUE
                E MOLD/CT
L47        4323 SEA ABB=ON  PLU=ON  "MOLD (FUNGUS)"+PFT,OLD,NT/CT
L48           0 SEA ABB=ON  PLU=ON  L43 AND L47
L49             QUE ABB=ON  PLU=ON  YEAST? OR MOLD? OR BACTER?
                D QUE L36
L50         221 SEA ABB=ON  PLU=ON  L28 AND L22
L51          55 SEA ABB=ON  PLU=ON  L50 AND L24
                D QUE
L52          11 SEA ABB=ON  PLU=ON  L51 AND (L38 OR L42 OR L45 OR L47
                OR L49)
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              D QUE
L53           0 SEA ABB=ON  PLU=ON  L52 AND L29
L54           1 SEA ABB=ON  PLU=ON  L52 AND (L9 OR L12)
              D KWIC
L55       40468 SEA ABB=ON  PLU=ON  "TEMPERATURE EFFECTS, BIOLOGICAL"+P
              FT,OLD,NT/CT
L56           QUE ABB=ON  PLU=ON  GASES+PFT,OLD,NT/CT
L57           QUE ABB=ON  PLU=ON  FUNGI+PFT,OLD,NT1/CT
L58        2836 SEA ABB=ON  PLU=ON  (L27 OR L31) AND (L57 OR L49 OR
              L45 OR L42 OR L38) AND (L24 OR L22)
              D 1-2 KWIC
L59          53 SEA ABB=ON  PLU=ON  L58 AND (L9 OR L12)
              D 1-2 KWIC
L60           2 SEA ABB=ON  PLU=ON  L59 AND ACID? AND L55
              D 1-2 KWIC
L61           6 SEA ABB=ON  PLU=ON  L59 AND L55
L62          31 SEA ABB=ON  PLU=ON  L59 AND ACID?
              D 30-31 KWIC
L63        5948 SEA ABB=ON  PLU=ON  BUBBLE(3A)(SIZE OR SIZING OR
              DIMINSION?)
L64           0 SEA ABB=ON  PLU=ON  L62 AND L63
              E BAG/CT
              E BAGS/CT
L65           QUE ABB=ON  PLU=ON  BAGS+PFT,OLD,NT/CT
              D QUE L30
L66          30 SEA ABB=ON  PLU=ON  L34 OR (L40 OR L41) OR L44 OR L46
              OR L52 OR L54 OR (L60 OR L61)
              D QUE
L67           QUE ABB=ON  PLU=ON  (L56 OR L9 OR L12)(L)BUBBL?
L68           0 SEA ABB=ON  PLU=ON  L66 AND L67
              SET LINE 250
              SET DETAIL OFF
              E BUBBLES+ALL/CT
              SET LINE LOGIN
              SET DETAIL LOGIN
L69           QUE ABB=ON  PLU=ON  BUBBLES+PFT,OLD,NT/CT
              D L1 CC
              D SCAN L1
              D SCAN L21
L70           0 SEA ABB=ON  PLU=ON  L66 AND L69
L71     1137811 SEA ABB=ON  PLU=ON  L28 OR L31
L72        1030 SEA ABB=ON  PLU=ON  L71 AND (L67 OR L69)
L73       48696 SEA ABB=ON  PLU=ON  L71 AND (L67 OR L69 OR L56 OR L9
              OR L12)
L74         113 SEA ABB=ON  PLU=ON  L73 AND L65
L75           3 SEA ABB=ON  PLU=ON  L74 AND (L22 OR L24)
              D 1-3 KWIC
L76           QUE ABB=ON  PLU=ON  BAG OR VESSEL OR CONTAINER?
L77        3174 SEA ABB=ON  PLU=ON  L73 AND L76
L78          59 SEA ABB=ON  PLU=ON  L77 AND (L22 OR L24)
              D 1-3 KWIC
L79           QUE ABB=ON  PLU=ON  PH+PFT,OLD,NT/CT
L80           7 SEA ABB=ON  PLU=ON  L78 AND L79
              D 1-7 KWIC
              D QUE L78
L81       45539 SEA ABB=ON  PLU=ON  (L28 OR L31) AND (L79 OR L22 OR
              L24)
L82          28 SEA ABB=ON  PLU=ON  L81 AND L29
L83           1 SEA ABB=ON  PLU=ON  L82 AND (L69 OR L63 OR L56 OR L9
              OR L12)
              D KWIC
L84        1065 SEA ABB=ON  PLU=ON  L81 AND (L69 OR L63 OR L56 OR L9
              OR L12)
              D QUE
L85          84 SEA ABB=ON  PLU=ON  L84 AND L55
L86          28 SEA ABB=ON  PLU=ON  L85 AND (L35 OR L38 OR L42 OR L45
              OR L47 OR L49 OR L57 OR L29)
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                D 1-3 KWIC
L87           4 SEA ABB=ON  PLU=ON  L86 AND (L76 OR L65)
                D 1-4 KWIC
L88          24 SEA ABB=ON  PLU=ON  L86 NOT L87
                D SCAN

     FILE 'STNGUIDE' ENTERED AT 14:29:52 ON 03 JUL 2007

     FILE 'HCAPLUS' ENTERED AT 14:35:07 ON 03 JUL 2007
                D QUE L21

     FILE 'STNGUIDE' ENTERED AT 14:38:29 ON 03 JUL 2007

     FILE 'HCAPLUS' ENTERED AT 14:39:35 ON 03 JUL 2007
L89          78 SEA ABB=ON  PLU=ON  L34 OR (L40 OR L41) OR L44 OR L46
                OR L52 OR L54 OR (L60 OR L61) OR L66 OR L75 OR L80 OR
                (L82 OR L83) OR (L86 OR L87 OR L88)
L90          73 SEA ABB=ON  PLU=ON  L89 AND (L22 OR L24 OR L79)
L91          46 SEA ABB=ON  PLU=ON  L89 AND (L22 OR L79)
L92          21 SEA ABB=ON  PLU=ON  L91 AND L24
L93          33 SEA ABB=ON  PLU=ON  L89 AND L29
                D 30-33 KWIC
L94          51 SEA ABB=ON  PLU=ON  L92 OR L93
L95           0 SEA ABB=ON  PLU=ON  L94 AND (L67 OR L69)
L96           0 SEA ABB=ON  PLU=ON  L89 AND (L67 OR L69)
L97           0 SEA ABB=ON  PLU=ON  L89 AND BUBBL?
L98          72 SEA ABB=ON  PLU=ON  L89 AND (L35 OR L38 OR L45 OR L47
                OR L49 OR L57)
L99          30 SEA ABB=ON  PLU=ON  L98 AND L29
L100          0 SEA ABB=ON  PLU=ON  L99 AND (L76 OR L65)
L101         10 SEA ABB=ON  PLU=ON  L98 AND (L76 OR L65)
L102         53 SEA ABB=ON  PLU=ON  L94 OR L99 OR L101
L103            QUE ABB=ON  PLU=ON  PY<2003 OR PRY<2003 OR AY<2003 OR
                MY<2003 OR REVIEW/DT
L104         36 SEA ABB=ON  PLU=ON  L102 AND L103
                D SCAN

     FILE 'STNGUIDE' ENTERED AT 14:49:35 ON 03 JUL 2007

     FILE 'HCAPLUS' ENTERED AT 14:52:35 ON 03 JUL 2007
L105         97 SEA ABB=ON  PLU=ON  L24 AND BUBBL?
                D 90-95 KWIC
L106          4 SEA ABB=ON  PLU=ON  L105 AND L63
                D 1-4 KWIC
                D QUE
L107          4 SEA ABB=ON  PLU=ON  L24 AND L63
L108          4 SEA ABB=ON  PLU=ON  L107 OR L106
L109          2 SEA ABB=ON  PLU=ON  L108 AND L103
L110         38 SEA ABB=ON  PLU=ON  L109 OR L104
                SAV L110 GIT870HCP/A
L111            QUE ABB=ON  PLU=ON  FOOD?/SC,SX
L112         29 SEA ABB=ON  PLU=ON  L110 AND L111
L113          9 SEA ABB=ON  PLU=ON  L110 NOT L112
                D SCAN

     FILE 'STNGUIDE' ENTERED AT 14:57:02 ON 03 JUL 2007

     FILE 'HCAPLUS' ENTERED AT 15:01:40 ON 03 JUL 2007
L114          6 SEA ABB=ON  PLU=ON  L113 AND L29
                D 1-6 TI CC
                D L114 KWIC
                D 3 KWIC
                D 6 KWIC
L115          1 SEA ABB=ON  PLU=ON  L114 AND  AEROBACTER/TI AND PH/TI
L116         30 SEA ABB=ON  PLU=ON  L115 OR L112
                SAV L116 GIT870HCPA/A
L117         53 SEA ABB=ON  PLU=ON  L19 AND (BEV? OR FRUIT? OR VEG?)
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L118        113 SEA ABB=ON  PLU=ON  L117 OR L20
L119         26 SEA ABB=ON  PLU=ON  L118 AND (L29 OR L24 OR L22 OR
                INDICAT? OR PH)
                D 1-26 TI
                D 1-26 AU
L120         26 SEA ABB=ON  PLU=ON  L119 OR L18 OR L21
L121         35 SEA ABB=ON  PLU=ON  L116 OR L52
L122         35 SEA ABB=ON  PLU=ON  L121 OR L60
L123         36 SEA ABB=ON  PLU=ON  L122 OR L21
                SAV L120 GIT870HCPIN/A
L124         34 SEA ABB=ON  PLU=ON  L123 NOT L120

     FILE 'STNGUIDE' ENTERED AT 15:34:19 ON 03 JUL 2007

     FILE 'AGRICOLA, FROSTI, FSTA' ENTERED AT 15:38:30 ON 03 JUL 2007
L125      21919 SEA ABB=ON  PLU=ON  FOOD(3N) ANAL?
L126          4 SEA ABB=ON  PLU=ON  L125 AND L63
                D 1-4 KWIC
L127        346 SEA ABB=ON  PLU=ON  (FOOD OR FEED OR EDIBL? OR
                VEGETABL? OR FRUIT? OR DRINK? OR BEV?) AND L29
L128          0 SEA ABB=ON  PLU=ON  L16 AND L127
L129          4 SEA ABB=ON  PLU=ON  L16 AND L125
                D 1-4 KWIC
L130        358 SEA ABB=ON  PLU=ON  L16
L131          2 SEA ABB=ON  PLU=ON  L130 AND (L3 OR L17)
                D 1-2
                D 1-2 KWIC
L132          6 SEA ABB=ON  PLU=ON  L129 OR L131
L133        255 SEA ABB=ON  PLU=ON  L130 AND (FOOD OR BEV? OR FRUIT?
                OR VEG? OR INDICAT? OR PH OR L29 OR L38 OR L42 OR L49
                OR BUBBL?)
L134          4 SEA ABB=ON  PLU=ON  L133 AND L125
                D 1-4 KWIC
L135          0 SEA ABB=ON  PLU=ON  L133 AND BUBBL?
L136         23 SEA ABB=ON  PLU=ON  L133 AND INDICAT?
                D 1-23 KWIC
L137          5 SEA ABB=ON  PLU=ON  L133 AND INDICATOR?
L138          9 SEA ABB=ON  PLU=ON  L129 OR L131 OR L132 OR L134 OR
                L137
                D 1-9 KWIC
L139          7 SEA ABB=ON  PLU=ON  L138 AND L103
                SAV L139 GIT870MULTIN/A
                D QUE STAT L127
L140        291 SEA ABB=ON  PLU=ON  L125 AND INDICATOR?
L141        765 SEA ABB=ON  PLU=ON  L125 AND PH
L142       1041 SEA ABB=ON  PLU=ON  L140 OR L141
L143          1 SEA ABB=ON  PLU=ON  L142 AND L127
                D QUE
L144          4 SEA ABB=ON  PLU=ON  L125 AND L127
                D QUE
L145         19 SEA ABB=ON  PLU=ON  L125 AND BUBBL?
                D 1-5 KWIC
L146        312 SEA ABB=ON  PLU=ON  L127 AND (L38 OR L49)
L147       1646 SEA ABB=ON  PLU=ON  L125 AND (L38 OR L49)
L148       1955 SEA ABB=ON  PLU=ON  L146 OR L147
L149         88 SEA ABB=ON  PLU=ON  L148 AND INDICATOR?
                D QUE
L150         22 SEA ABB=ON  PLU=ON  L149 AND L29
                D 1-3 KWIC
L151         17 SEA ABB=ON  PLU=ON  L150 AND L103
                SAV L151 GIT870MULT/A
L152         17 SEA ABB=ON  PLU=ON  L151 NOT L139
                D QUE L120
                D QUE L139

     FILE 'HCAPLUS, AGRICOLA, FROSTI, FSTA' ENTERED AT 16:08:54 ON 03
     JUL 2007
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L153          31 DUP REM L120 L139 (2 DUPLICATES REMOVED)
                 ANSWERS '1-26' FROM FILE HCAPLUS
                 ANSWER '27' FROM FILE AGRICOLA
                 ANSWERS '28-30' FROM FILE FROSTI
                 ANSWER '31' FROM FILE FSTA
               D L153 1-31 IBIB ED AB
               D QUE L124
               D QUE L152
L154          44 DUP REM L124 L152 (7 DUPLICATES REMOVED)
                 ANSWERS '1-33' FROM FILE HCAPLUS
                 ANSWERS '34-37' FROM FILE AGRICOLA
                 ANSWERS '38-39' FROM FILE FROSTI
                 ANSWERS '40-44' FROM FILE FSTA
               D L154 1-33 IBIB ED ABS HITIND
               D L154 34-44 IBIB ED AB IND
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